QUECHUA TO SPANISH CROSS-LINGUISTIC INFLUENCE AMONG CUZCO QUECHUA-SPANISH BILINGUALS: THE CASE OF EPISTEMOLOGY

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Throughout the course of this dissertation, I respond to three related research goals. In order to investigate these goals, I gathered data from 169 members of two Cuzco, Peru non-profit governmental agencies, the *Asociación Civil 'Gregorio Condori Mamani' Proyecto Casa del Cargador*, 'Gregorio Condori Mamani' Civil Association House of the Carrier Project' and *El Centro de Apoyo Integral a la Trabajadora del Hogar*, 'Center for the Integral Support of Female Home Workers'. The majority of my participants speaks Quechua natively and acquired Spanish as an L2 during childhood or adolescence. I collected data from these two populations through the means of ethnography, demographic questionnaires, a social network analysis, a language attitudes study, elicitation of short narratives, role play interviews and a subjective reaction test. In response to my first research goal, I examine the nature of the semantics and pragmatics of the Cuzco Quechua epistemic system, including the epistemic suffixes, *-mi/-n* and *-si/-s*, and the Quechua verb past tenses, *-rqa-* and *-sqa-*. I find the Quechua epistemics to encode meaning beyond information source and level of certainty and to be affected by a variety of discourse factors. In my treatment of my second research goal, I find 31 different phonetic, morphosyntactic, and calque Quechua to Spanish cross-linguistic influence features to occur in my participants' speech. I also examine the specific case of the cross-linguistic influence of the Quechua epistemic system on the Spanish spoken by my participants. The presence of cross-linguistic influence in my participants' speech supports a model of child SLA in which the L1

plays a significant role in the acquisition of the L2. Finally, in response to my third research goal, I find various demographic characteristics, social network characteristics, and the language attitudes of my participants to correlate with their production of the 31 Quechua to Spanish phonetic, morphosyntactic, and calque cross-linguistic features. While presenting my results for my third research goal, I suggest that my participants may purposefully use various Quechua cross-linguistic features in order to identify themselves as Quechua speakers and distinguish themselves from native Spanish speakers, thereby creating an in-group variety of Spanish.

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PREFACE

Acknowledgements

I would like to thank all of those without whose support the completion of this dissertation would not have been possible. Firstly, I am very grateful for the assistance, generosity, and friendship of my study participants and the staff members of both the *Centro de Apoyo Integral a la Trabajadora del Hogar* and the *Asociación Civil 'Gregorio Condori Mamani' Proyecto Casa del Cargador*. These two agencies serve Peruvian migrants in such important and invaluable ways. I am also indebted to my key informant, Georgina Maldonado Gómez, and her family, who hosted me during my three field seasons. They welcomed me into their home and made me feel like one of the family.

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This dissertation engages topics of both theoretical and applied Hispanic linguistics. This being the case, the contribution of this work primarily supports the development of linguistic theory and the field. This theoretical contribution is outlined throughout the course of this work. However, it is also my hope that the contribution of this work may reach beyond academia to further a general recognition and respect for the Quechua language, its speakers, and Andean

Spanish. I would like the readers of this work to travel to the Andes not only to marvel at the archaeological sites left by the citizens of the once-powerful Incan Empire but to also know and support the Quechua-speaking descendants of that Empire, such as the inhabitants of the *Centro de Apoyo Integral a la Trabajadora del Hogar* and the *Asociación Civil 'Gregorio Condori Mamani' Proyecto Casa del Cargador*.

Having the ability to speak, use, and understand a language, whichever that language may be, should always be a source of pride, for it is by communicating with each other that we are able to better help each other and discover the richness that lays in the variety of thought and culture in our world. As speakers of Andean Spanish, my study participants, who belong to two cultures, the Andean and the dominant Peruvian Spanish-speaking culture, creatively and innovatively draw on the resources of their two languages, Quechua and Spanish, in order to express themselves as they see fit. The combination of Quechua and Spanish language resources accessed in the speaking of Andean Spanish may convey certain messages more easily and succinctly for these speakers than the use of either language alone. As bilingual and bicultural speakers, my study participants need not conform to the standard norms for either of their languages.

List of Quechua affixes and enclitics in glosses

The labels used in the glosses of examples are based on Aráoz and Salas'(1993) and Faller's (2002) terminology. Affixes are marked as verbal (v) or nominal (n).

-ni (v), *-y* (n)	1	first person
-saq (v)	1FUT	first person future
-nchis (v,n)	1PL.INCL	first person plural inclusive
-yku (v,n)	1PL.EXCL	first person plural exclusive
-wa (v)	1O	first person object recipient
-yki (v)	1S2O	first person subject to second person object
-nki (v), *-yki* (n)	2	second person
-nkichis (v)	2PL	second person plural
-waq (v)	2IRR	second person irrealis
-n (v,n)	3	third person
-nqa (v)	3FUT	third person future
-sunki (v)	3S2O	third person subject to second person object
-manta (n)	ABL	ablative case
-ta (n)	ACC	accusative case
-pis/-pas (n)	ADD	additive
-ta	ADVL	adverbalizer
-q (v)	AG	agentive
-pu (v)	BEN	benefactive
-chi (v)	CAUS	causative
-puni	CERT	certainty
-mu (v)	CIS	cislocative
-raq	CONT	continuative
-taq	CONTR	contrastive
-paq	DAT	dative
-cha (n)	DIM	diminutive
-yu (v)	DIR	dirrectional
-ña	DISC	discontinuative
-chus	DUB	dubitative
-yá	EMO	emotive
-ni	EUPH	euphonic
-q/-pa (n)	GEN	genitive
-spa (v)	GER	gerund
-ru (v)	HORT	hortative
-man (n)	ILLA	illative
-y (v)	IMP	imperative
-ri (v)	INC	inchoative
-ntin (n)	INCL	inclusive
-y (v)	INF	infinitive
-wan (n)	INSTR	instrumental
-yu (v)	INT	intensifier

-chu	INTR	interrogative
-man (v)	IRR	irrealis
-lla	LIM	limitative
-pi (n)	LOC	locative
-chu	NEG	negative
-spa, -na (v)	NMLZ	nominalizer
-ku (v), *-kuna* (n)	PL	plural
-yoq (n)	POSS	possessive
-sqa (v)	PP	past participle
-sha (v)	PROG	progressive
-ku (v)	REFL	reflexive
-qti (v)	SEQ	sequential
-má	SURP	surprise
-qa	TOP	topic
-cha (n)	VBLZ	verbalizer

1. Introduction

1.1. Research Goals

For the purposes of the present study, I examine data gathered during three summer field seasons among two speech communities living in Cuzco, Peru. The main participants of my study are young native Quechua speakers, who have acquired Spanish as a second language during childhood or adolescence.

The present work attempts to achieve three separate but related research goals. Below, I briefly outline these goals, the methods I employ to accomplish them, and the fields that benefit from the attainment of these goals. In later sections, I elaborate on both the theoretical motivations for these research goals and my methodology.

1.1.1. Research Goal 1

I investigate the use (pragmatics) and meaning (semantics) of the Cuzco Quechua epistemic system, including the epistemic suffixes, *-mi/-n* and *-si/-s* (*-mi* and *-si* are placed after consonants and *-n* and *-s* follow vowels), and the Quechua verb past tenses, *-rqa-* and *-sqa-*, in discourse. Following Lyons (1977), Givón (1982), Bybee (1985), Palmer (1986), and Willett (1988) (cited in Escobar, 2000:213), I propose that epistemic markers broadly refer to attitudes toward knowledge or information and that evidentials, which make reference to the information source for an utterance (e.g. first-hand information, second-hand information, etc.), are a subcategory of epistemics.

In order to achieve this research goal, I examine data gathered through a variety of techniques, including a Role Play Investigation, ethnographic discourse analysis of recordings of spontaneous, natural conversation, and a Subjective Reaction Test. My findings on this topic inform the fields of Quechua pragmatics, semantics, and dialectology.

1.1.2. Research Goal 2

My second research goal is to investigate the occurrence of cross-linguistic influences of Cuzco Quechua on the variety of Spanish spoken by my study participants. In order to achieve this research goal, I investigate all types of cross-linguistic influence as well as the specific case of the cross-linguistic influence of the Cuzco Quechua epistemic system. I research this issue through the application of statistical methods and an examination of short narratives, a Role Play Investigation, recorded spontaneous, natural conversation, and informal interviews. Through the investigation of cross-linguistic influence occurring among my study participants, I address current debates regarding cross-linguistic influence among child second language learners in the field of Second Language Acquisition. Furthermore, my findings on this topic inform the field of Spanish dialectology.

1.1.3. Research Goal 3

Thirdly, I investigate possible influences on and sources of variation in the Spanish speech of my study participants. In order to realize this goal, I apply statistical methods in my examination of the effects of a variety of demographic characteristics on my participants' speech, such as sex and time spent living in Cuzco. I also carry out ethnography with the intent of pin-

pointing those demographic factors that are relevant in the eyes of my participants, in terms of determining speech characteristics. In addition, I carry out a social network investigation to examine the characteristics of the social networks of my study participants. Finally, I carry out language attitudes studies among my study participants as well as among members of the larger Cuzco and Peruvian communities. I investigate correlations among demographic factors, social network characteristics and language attitudes with the speech of my participants. Accomplishment of this third goal informs the field of Spanish sociolinguistics.

2. Literature Review

2.1. Quechua History and Language

Today, many of Cuzco, Peru's inhabitants are bilingual speakers of the country's two official languages, Quechua and Spanish. Quechua, the indigenous language that was spoken by the citizens of the Incan Empire, unlike Spanish, is agglutinating and belongs to the Quechuan language family. Months after Quechua was granted co-official status with Spanish, in 1975, a commission of the Peruvian government approved the official basic alphabet for the Quechua language and recognized six major dialects (Ancash-Huaylas, Ayacucho-Chanca, Cajamarca-Canaris, Cuzco-Collao, Junin-Huanca, and San Martín) (Luis Morató Peña, 1995:XXV). According to Lapesa (1997:541-2), Quechua currently ranks first among indigenous languages in Spanish-speaking regions of the world, in terms of its number of speakers. Today, there are over ten million speakers of Quechua living throughout southern Colombia, Ecuador, Peru, Bolivia, and northern Argentina (Silver & Miller, 1997:7). Therefore, although some claim that Quechua may be slowly on its way to extinction in the presence of the economic and political power of Spanish, it is still a very vital and important indigenous language in South America.

2.1.1. Quechua History

As the Incan Empire expanded during the 15th and 16th centuries, the Incas spread their culture and standardized version of Quechua slowly and peacefully to neighboring regions. This slow and peaceful spreading of the Quechua language and culture contrasted sharply with the spread of the Spanish language and culture achieved during the Spanish Conquest (Marroquín-Llamoca, 1990:19).

In the 16th century, Pizarro led the conquest of the Incan Empire and extended the line of communication from Spain to the Caribbean and down the Pacific side of South America to Lima, Peru. Both Mexico City and Lima were very attractive cities in the eyes of the Spaniards, because of the large indigenous cultures that flourished there, the Aztec and the Incan. Soon, Mexico City and Lima together became the main administrative and cultural centers for Spain in the Americas. Resulting from this special status, the Spanish spoken in and around Mexico City and Lima has remained closer to standard central Peninsular Spanish than has the Spanish spoken in areas located farther away from these main Spanish cultural and administrative centers (Penny, 1999:18-19). Although the Spanish spoken in Peru and Mexico still shares a great deal with standard central Peninsular Spanish, the indigenous languages of these two countries have exerted a substantial amount of substrate influence on the Spanish in these countries over the centuries.

2.1.2. Where Quechua is spoken today

Peru, Ecuador, and Bolivia host the largest numbers of Quechua speakers, while smaller Quechua-speaking populations may be found in southern Colombia, northern Argentina, Chile, and Brazil (Lee, 1997:16-17). In his work, *Estudios de Lingüística Andina*, Germán de Granda refers to the whole group of countries where Quechua is spoken as comprising the 'Andean area' (2001:107-8). In his *El Español de América*, John M. Lipski refers to the collection of countries mentioned above as the 'Andean dialectal zone' (1996:262).

While the spread of the Quechua language is due in large part to the efforts of the Incas in spreading the Incan Empire, Spaniards also played a role in the extension of Quechua as a lingua franca in order to control large portions of South America. In other words, the Spaniards

took advantage of the organizational structure already implemented by the Incas to carryout their own conquest. Therefore, as a result of both conquests, speakers of smaller indigenous groups shifted toward the use of Quechua.

2.1.2.1. Peru

Prior to the arrival of the Spaniards, Peru was the political and cultural center of the Incan Empire. Today, the geographical area covered by Quechua speakers is still larger in Peru than in any other country. Quechua speakers live in twenty of the twenty-four Peruvian political departments (Lee, 1997:17). In fact, in comparison with all other Latin American countries, the indigenous languages of Peru have undergone the most intense language contact with Spanish over the centuries (Lipski, 1996:336).

2.1.2.2. Bolivia

Also, today, large numbers of Quechua speakers continue to inhabit portions of Bolivia. In the fifteenth century, the Incas began to stretch their influence into present-day Bolivia, into the territory to the south of Lake Titicaca (Lipski, 1996:208). Today, Quechua is spoken in six of the nine Bolivian political departments. Ranging from the department with the highest number of Quechua speakers to the lowest, these are Potosí, Cochabamba, Chuquisaca, Oruro, Santa Cruz and La Paz (Lee, 1997:19).

2.1.2.3. Ecuador

Like Peru and Bolivia, Ecuador also hosts a large Quechua-speaking population. The Quechua dialect spoken in Ecuador is referred to as ‘Quichua’. In Ecuador, Quechua speakers

inhabit both the Andes as well as the Amazon jungle, living in Imbabura, Pinchincha, Cotopaxi, Napo and Pastaza, Tungurahua, Bolívar, Chimborazo, Cañar, and Azuay and Loja (Lee, 1997:20).

Some Ecuadorian towns have developed a stable Spanish-Quechua interlanguage, called 'Media Lengua' (literally 'half language') (Lipski, 1996:263). The 'Media Lengua' has been studied extensively by Muysken (1979, 1981). Also, according to Lipski, the Spanish spoken by monolingual Spanish speakers living in Ecuador has converged toward Quechua (1996:263).

2.1.2.4. Colombia

Although the number of Quechua speakers living in Colombia today is much lower than the number that existed during the reign of the Incan Empire, a population of Quechua speakers still exists in the southwestern section of Colombia, close to the border with Ecuador. Lee identifies Quechua-speaking pockets living in the Aponte community (in the Nariño department), the Santa Rosa de Caquetá municipality (in the Cauca department), and around the Descanse population, in areas of Alto Caquetá (in the towns of Santiago and San Andrés, in part of Colón, close to Mocoa, in Limón, in Guarango, and near Puerto Umbría, where 'Quechua' is referred to as 'Ingano') (1997:24).

2.1.2.5. Argentina

As is the case in Colombia, in Argentina, the Quechua-speaking population today consists of many fewer speakers than was the case at the time of the Incan Empire. However, still today, Quechua speakers are living in provinces of northeastern Argentina. Quechua exists in an endangered state in the Jujuy province, extending through the mountainous region of Salta

to Chañi in the south. A stronger Quechua-speaking population exists in the northern and central portions of the Santiago del Estero province, covering the Capital, Banda, Figueroa, Matará, Sarmiento, Robles, Loreto, San Martín, Salavina, and Avellaneda departments as well as some areas of Copo, Alberdi, Pellegrini and General Taboada (Lee, 1997:22).

2.1.2.6. Chile

According to Lipski, although the Incan Empire stretched as far as Chile, the presence of Quechua speakers in Chile was never very significant (1996:220). Today, Lee identifies a few thousand Quechua-speakers living in communities in the northwestern section of Chile, in the Lauca department, in the province of Antofagasta (1997:26).

2.1.2.7. Brazil

Finally, as is the case in Chile, the presence of Quechua speakers living in Brazil has also never been very significant. Lee (1997:25-6) cites the work of Cerrón-Palomino (1987:72), who stated that there are around 700 Quechua speakers, many of whom are trilingual, speaking Spanish and Portuguese as well, living in the Acre region, on the shore of the connection of Chandless River with the Alto Purús. Furthermore, some Quechua speakers were thought by Cerrón-Palomino to be living in the Tabatinga zone, near the Amazon River.

2.1.3. Classification of Quechua Dialects

In her work, *Morfosintaxis amerindias en el español americano, Desde la perspectiva del quechua*, Tae Yoon Lee (1997:26) presents the following diagrammed classification of the Quechua dialects:

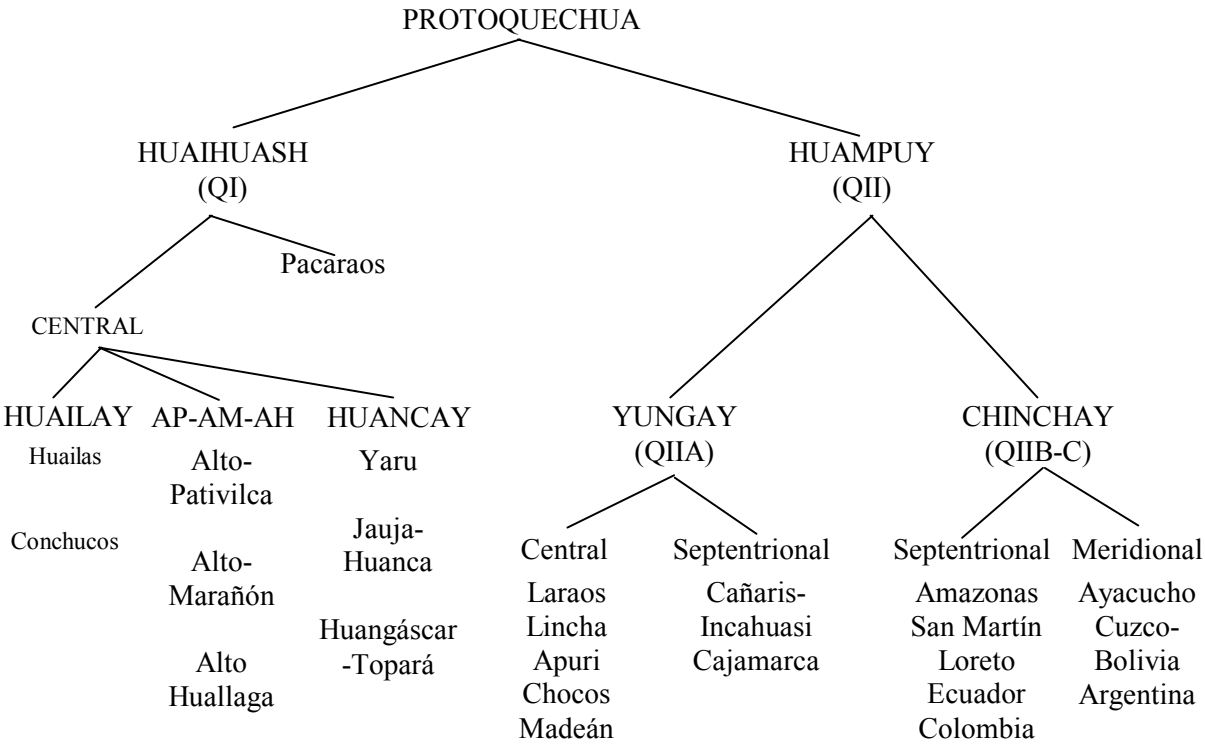


Figure 1. Classification of Quechua dialects (adapted from Lee (1997:26))

Lee explains that linguists distinguish between two major groupings of Quechua varieties, depicted above as HUAIHUASH (QI), or central, and as HUAMPUY (QII), or northern/southern. Those Quechua speakers of the QII variety extend geographically from Colombia in the north to Argentina, in the south. Cuzco Quechua is the most prestigious dialect of the QII variety (Lee, 1997:26). According to Lee (1997:27), Parker (1972) refers to QI as 'Quechua B' and QII as 'Quechua A'.

Furthermore, according to Lee (1997:30), the territory covered by speakers of QII is much larger than that covered by speakers of QI. QII speakers may be found throughout all of the countries described above as forming the 'Andean area' (de Granda 2001:107-8), or the 'Andean dialectal zone' (Lipski, 1996:262), that is, Peru, Bolivia, Ecuador, Colombia, Argentina, Chile, and Brazil.

The Cuzco-Bolivia dialect alone is spoken over a large geographic area. In Peru, the Cuzco-Bolivia dialect is spoken in the western half of the Apurímac department, the department of Cuzco, the La Unión provinces, Condesuyos, Castilla and Cailloma in Arequipa, the provinces of Carabaya, Melgar, Lampa, and the western part of Sandia, along with the city of Puno, and the province of Sánchez Cerro (Moquegua). It is also spoken in Bolivia, Salta and Jujuy (Argentina), and Antofagasta (Chile) (Lee, 1997:34).

In general, Lee (1997:27) claims, all Quechua dialects are quite homogeneous. She states that the syntax of all Quechua dialects is similar, maintaining the basic SOV word order, but that there are some differences from dialect to dialect in the phonology and morphology.

2.2. Language Contact and Change

Countless linguists have found that languages in contact, such as Quechua and Spanish, may exert influence on each other (Chumbow, 1984, Appel & Muysken 1987, Abunuwara 1992, Cook 1992, Clyne 1997, Hoffmann 2001). In *Language Contact, Creolization, and Genetic Linguistics,* Sarah Grey Thomason and Terrence Kaufman (1988:9) examine the changeable nature of languages:

> First, all languages change through time. The main stimuli for change are drift, i.e., tendencies within the language to change in certain ways as a result of structural imbalances; dialect interference, both between stable, strongly differentiated dialects and between weakly differentiated dialects through the differential spread (in 'waves') of particular changes; and foreign interference.

Above, when Kaufman and Thomason mention ‘foreign interference’, they are referring to the influence of one language on another through language contact.

In her book, *Language Contact, an Introduction*, Sarah Grey Thomason presents the reader with discussions about factors affecting ‘language contact’, which she defines as “…the use of more than one language in the same place at the same time... (when) …some

communication between speakers of different languages is necessary" (2001:1). Thomason goes on to define contact-induced language change as "…any linguistic change that would have been less likely to occur outside a particular contact situation…" (2001:61-2). Thomason also recognizes that some language changes may have multiple causes, some of which could be internal and some of which could be external.

2.2.1. Mechanisms of Contact-Induced Change

Although linguists have carried out studies on language contact phenomena, or mechanisms of contact-induced change, for decades, there remains much debate as to the nature and existence of these phenomena. A variety of language contact phenomena have been studied. Thomason identifies seven mechanisms: passive familiarity, negotiation, second-language acquisition strategies, bilingual first-language acquisition, change by deliberate decision, code-switching, and code alternation. I would add lexical borrowing and cross-linguistic influence (sometimes referred to as 'transfer') to this list. Below, I briefly describe passive familiarity, negotiation (or convergence), deliberate decision, lexical borrowing, code alternation, and code-switching. Following these brief descriptions, I develop the concept of 'cross-linguistic influence', a primary focus of this study, in more detail.

2.2.1.1. Passive Familiarity

Passive familiarity as a mechanism of contact-induced change occurs when "…a speaker acquires a feature from a language that s/he understands (at least to some extent) but does not speak" (Thomason, 2001:273). In the Andean region, this process may occur when Quechua speakers, who understand some Spanish but do not speak it, nevertheless acquire a feature from

Spanish. This phenomenon is becoming more and more common in the Andean region, as the descendents of native Quechua speakers shift to the use of Spanish. Likewise, this process may occur when Spanish speakers, who understand some Quechua but do not speak it, nevertheless acquire a feature from Quechua.

2.2.1.2. Negotiation

Negotiation, or convergence, occurs when "…speakers change their language to approximate what they believe to be the patterns of another language or dialect" (Thomason 2001:272). In the Andean region, negotiation may occur as native Quechua speakers, who are learning Spanish as their L2, change their Quechua in order to approximate Spanish language patterns. In Ecuador, negotiation is occurring where Quechua and Spanish are converging toward each other (Lipski, 1996:263).

2.2.1.3. Deliberate Decision

Deliberate decision occurs as a mechanism of contact-induced change when speakers deliberately decide to change a language as a result of contact with another language. In the Andean region, this may occur when native Quechua speakers learning Spanish deliberately decide to ignore marked features of Spanish. Also, Quechua or Spanish speakers may decide to borrow a word, or not, from the other language. A deliberate decision to change one's native or second language in a contact situation may be related to one's attitudes toward the languages involved.

2.2.1.4. Code Alternation

Code alternation occurs when "…bilinguals use one of their languages in one set of environments and the other language in a largely different set of environments" (Thomason, 2001:261). For example, in the Andean region, code alternation may occur when bilingual Quechua-Spanish speakers speak Quechua in certain environments, such as at home and with family members, and speak Spanish in other environments, such as at the doctor's office, at school, or while addressing a public official. Decisions of bilingual speakers regarding which environments are appropriate for the use of their two languages may also correlate with their attitudes toward the languages involved.

2.2.1.5. Lexical Borrowing

Poplack (1981:170, as cited in Myers-Scotton 1993:22) makes a distinction between 'borrowing' and 'code-switching'. According to Poplack, 'borrowed forms' occur when there is "...complete adaptation of EL (Embedded Language) forms to the ML (Matrix Language)..." This means that borrowed forms, unlike code-switches, have been completely adapted into the phonological, morphological, and syntactic systems of the Matrix Language. Thomason (2001:134) agrees when she states that lexically-borrowed elements are 'nativized', or adapted to the structure of the receiving language.

Silva-Corvalán (1994:22) cites Poplack, Sankoff, and Miller (1988), who make a distinction between 'nonce borrowings' and other types of borrowing: "These (nonce borrowings) are single lexemes/bound morphemes which are morphologically and syntactically integrated into the ML, but which show little phonological integration."

Myers-Scotton (1993), however, disagrees with Poplack's (1981) distinction between 'borrowing' and 'code-switching' and questions the reason for distinguishing the two as separate processes. Furthermore, Myers-Scotton (1993:177,183) observes that not all borrowed forms are always fully phonologically and morphosyntactically integrated into the Matrix Language. She states, "…there are many cases of partial integration for B forms as well as for CS forms" (1993:183). Instead of making a sharp distinction between 'borrowing' and 'code-switching', Myers-Scotton (1993:206-7) places the two along a continuum, "…with B forms apparently more under the direction of ML procedures than CS forms…". Under Myers-Scotton's (1993:182) Matrix Language Frame Model (MLF model), "CS forms may become B forms through an increase in their frequency and their adoption by monolinguals; nothing more is required".

Borrowing is very common in bilingual Quechua-Spanish speaking communities of South America. Donald Solá sought to represent Spanish borrowings in Quechua in his two Quechua teaching texts, *Spoken Cuzco Quechua*, *Unidades 1-6* and *Unidades 7-12* (1967). An example of a Spanish borrowing appearing in these Quechua texts is *almusay*, /almusay/, 'to eat lunch'. This borrowed item has been both phonologically and morphologically adapted into Quechua from the Spanish *almorzar*, /almorsar/. Phonologically, we may observe that the Spanish vowel phoneme, /o/, has been transformed into the Quechua vowel phoneme, /u/. Furthermore, the Spanish ambi-syllabic consonant cluster, *-rz-*, has been simplified and transformed into the Quechua *-s-*. Finally, in Quechua, *-y*, the morphological ending that occurs on infinitive verbs, replaces the Spanish verbal morphology.

FACTORS AFFECTING LEXICAL BORROWING

According to Thomason and Kaufman (1988:133), social context, rather than the structure of the languages involved, determines what kind of borrowing may occur. In her article, "Lending the 'Unborrowable': Spanish Discourse Markers in Indigenous American Languages", Jill Brody (in Silva-Corvalán, 1995) cites Thomason and Kaufman's work and recognizes that social factors influence the phenomenon of borrowing. These are identified by Brody as the extent of bilingualism, the intensity of language contact, the political nature of the contact, the relative sizes of the speech communities coming into contact, and the levels of prestige associated with the languages and their speakers.

2.2.1.6. Code-switching

There has been much debate among linguistic researchers as to the most accurate definition of the phenomenon known as 'code-switching'. Many researchers have added to or modified definitions employed by others. According to Thomason (2001:131), code-switching is "by far the most studied" of the mechanisms of contact-induced language change. Thomason (2001:262) defines code-switching as: "The use of material from two (or more) languages by a single speaker with the same people in the same conversation."

Myers-Scotton (1993:3) also uses the unit of a single conversation in her definition of code-switching: "Codeswitching (CS) is the selection by bilinguals or multilinguals of forms from an embedded variety (or varieties) in utterances of a matrix variety during the same conversation....CS may be either intersentential or intrasentential." Intersentential switching occurs at a sentence boundary, while intrasentential switching, or code-mixing, occurs within a single sentence.

In her work, *Lenguas en contacto,* Silva-Corvalán defines 'code-switching' as the alternating use of two languages by the same speaker during a speech act (1989:179). She cites Einar Haugen's definition of code-switching. According to Haugen (1973:521 as cited in Silva-Corvalán 1994:21), code-switching "...refer(s) to the alternate use of two languages including everything from the introduction of a single, unassimilated word up to a complete sentence or more into the context of another language." 'Unassimilated' linguistic material refers to language that has not been phonologically or morphologically integrated into the base language.

FACTORS AFFECTING CODE-SWITCHING

Just as variation exists concerning the definition of code-switching, we also find variation in the factors thought to affect code-switching. Much debate among researchers has involved a few proposed linguistic constraints on code-switching. Poplack (1981:234-260) presents some linguistic constraints on code-switching (this researcher's numbering of 1-5):

> (1) *The free morpheme constraint*. Codes may be switched after any constituent in discourse provided that constituent is not a bound morpheme.
>
> (2) *The equivalence constraint*. Code-switches will tend to occur at points in discourse where juxtaposition of L1 and L2 elements does not violate a syntactic rule of either language, that is, at points around which the surface structures of the two languages map onto each other.
>
> (3)…major constituents are switched more frequently than smaller ones...
>
> (4) Among the intrasentential switches, we find single nouns to be the most frequently switched category...
>
> (5) … code-switching behavior may be used to measure bilingual ability.

In "Linguistic constraints on intrasentential code-switching: A study of Spanish/Hebrew bilingualism", Susan Berk-Seligson (1986:334-5) finds evidence to support number 1, the free morpheme constraint, and contradict numbers 2, 3, and 5 above. For the speakers of her study, she finds the equivalence constraint not to be valid. Furthermore, she states that "…size-of-

constituent, as a constraint on code-switching, is also useful only in languages with similar syntactic structure." Finally, she concludes that type of code-switching is unrelated to degree of bilingualism.

Myers-Scotton (1993:34-5) observes that numerous counter examples to the equivalence constraint and free-morpheme constraint have been found in the literature and states, "A review of data presented in current CS literature shows that there are good reasons to reject all the earlier constraints noted above as generally applicable". She goes on to state, "…principles derived from the MLF (Matrix Language-Frame) model predict CS data more accurately and are better motivated" (1993:34-5). Myers-Scotton's MLF model proposes the following set of interrelated hypotheses (1993:230, this researcher's numbering of 1-6):

> (1) The ML sets the morphosyntactic frame for ML + EL constituents.
>
> (2) Morpheme Order Principle: Morpheme order must not violate ML morpheme order.
>
> (3) System Morpheme Principle: All syntactically relevant system morphemes must come from the ML.
>
> (4) The Blocking Hypothesis: The ML blocks the appearance of any EL content morphemes which do not meet certain congruency conditions with the ML lemma which directs frame-building in the constituent.
>
> (5) The EL Island Trigger Hypothesis: Obligatory EL islands result whenever an EL morpheme not permitted under either the ML Hypothesis or the Blocking Hypothesis is to appear in the sentence.
>
> (6) The EL Implicational Hierarchy Hypothesis refers to optional EL islands. It states that generally only those constituents which are either formulaic or idiomatic or peripheral to the main grammatical arguments of the sentence will occur as optional EL islands.

Myers-Scotton finds choosing the Matrix Language to be "…a socially motivated decision…" (1993:232). Furthermore, she recognizes the "socio-psychological motivations for CS" and finds speakers to code-switch in order to "negotiate interpersonal relationships" (1993:232). Finally, according to Myers-Scotton (1993:234), the role of code-switching is as a "social indexing device", which serves to "…remind the addressee of another identity apart from the dominant one being conveyed by the language which is the choice for the rest of the interaction".

Regarding constraints on code-switching, Thomason states (2001:131), “Constraints have been proposed, especially on code-switching, but there is no consensus among specialists that any of the proposed constraints are valid.” Silva-Corvalán (1989:180) recognizes both internal linguistic factors and external social factors, such as physical environment, conversational participants, conversation topic, and ethnic identification, as influential in the occurrence of code-switching.

In her article, "'Sometimes I'll start a sentence in Spanish *y termino en español*: toward a typology of code-switching", Shana Poplack (1981:257) hypothesized that the following extralinguistic factors had an effect on the occurrence of intrasentential code-switching: "...sex, language dominance of speaker, age of arrival in the United States and age of L2 acquisition, educational attainment, the speaker's feelings toward his own ethnicity, amount of continued contact with Puerto Rico, and location of workplace."

2.3. The History of ‘Transfer’

Some terms that have been used to describe language-to-language influence are ‘transfer’ (Carmen Silva-Corvalan, 1995), ‘interference’ (Thomason & Kaufman, 1988), also known as ‘negative transfer’ (Gass & Selinker, 2001), ‘facilitation’, also known as ‘positive transfer’ (Gass & Selinker, 2001), and ‘cross-linguistic influence’ (Kellerman and Sharwood Smith, 1986). For reasons that I will discuss later on, I choose to employ the terminology used by Kellerman and Sharwood Smith, ‘cross-linguistic influence’, throughout the course of this work.

The notion of ‘transfer’, first applied to general learning rather than to language learning, has its origins in behaviorist theory in the field of psychology of learning, where it was

conceived of as "the psychological process whereby prior learning is carried over into a new learning situation" (Gass & Selinker, 2001:66).

In 1933, Bloomfield, a proponent of the behaviorist theory, applied the notion of 'transfer' to language learning in his famous work, *Language*, which proposed that first language learning was the acquisition of a set of habits. Infants learning their first language were thought to develop speech as responses to stimuli. Furthermore, the main mechanisms of L1 acquisition were thought to be mimicking and analogizing.

Within the behaviorist framework, second language acquisition was seen as the development of a new set of habits (Gass & Selinker, 2001:71). Applying the notion of 'transfer' to the second language learning situation, second language learners were thought to carry over their first language knowledge to the learning of their second language in a direct, one-to-one correspondence fashion.

'Contrastive Analysis', spearheaded by Lado (1957) was an outgrowth of the behaviorist vision of language and language learning. According to the Contrastive Analysis Hypothesis, while learning a second language, learners must learn only that which differs from their first language. All that does not differ was thought to be transferred directly from the first language.

In the 1960s, with the advent of 'Error Analysis', developed as a reaction to Contrastive Analysis, the behaviorist theory of language and language learning came under attack. Pit Corder's work, "The Significance of Learners' Errors" (1967), is a significant representative of the Error Analysis approach. Upon examination of the production of second language learners, two types of errors were found, interlingual and intralingual. Only interlingual errors could be attributed to native language transfer. Intralingual errors were found to be independent of the native language.

In other words, intralingual errors could not be predicted from native language influence. Error Analysts hypothesized that the intralingual errors owed their presence to learners' innate underlying rule-governed interlanguage systems. Such interlanguage systems, located in the learners' brains, were hypothesized to enable the second language learners to figure out the new second language systems. Practitioners of Error Analysis came to view language as structured rules rather than as a set of habits. In order to acquire language, rather than imitate, learners were now thought to apply active rule formation. Because 'transfer' had its origins with the behaviorist theory and the behaviorist view of language and language learning came under attack in light of Error Analysis, many Error Analysts rejected the existence of language transfer (George (1972), Whitman & Jackson (1972), Dulay and Burt (1975), Larsen-Freeman (1978)).

In the 1970s, morpheme-order studies, based on Dulay and Burt (1974a, 1974b, 1975), attempted to prove the 'L1 = L2 Hypothesis', namely, that child second language acquisition was identical to child first language acquisition. If children with different native languages could be found to acquire the morphemes of their common second language in the same order, this would be evidence for an innate interlanguage system and evidence against language transfer as a primary or sole influence on second language acquisition.

Beginning in the mid to late 1970s, linguists questioned whether language transfer and the role of the native language should be equated with a behaviorist view of learning. They wondered whether rejecting behaviorism necessarily meant rejecting the notion of language transfer (Gass & Selinker, 2001:118). Rather than directly transferring aspects of the native language to the learning of the second language, as had been previously assumed to occur in the behaviorist tradition, linguists began to conceive of more creative ways in which the native language might influence the second language. For example, even assuming that Dulay and

Burt's L1 = L2 Hypothesis is robust, (i.e. assuming that second language learners with differing native languages acquire the morphemes of the second language in the same order) the native language might be found to affect the length of time that learners spend in different stages of acquisition.

Rather than attempting to prove the existence or non-existence of language transfer, beginning in the mid to late 1970s, linguists refocused their goal to investigate *how* and *when* learners' native languages may influence second language acquisition. This question is still being explored today. Those who claim that the native language and innate facts of development work together in the process of second language acquisition incorporate "transfer" into a mentalist/cognitive framework rather than a behaviorist framework.

Along with this new focus came new terminology. In 1986, Kellerman and Sharwood Smith proposed the existence of 'cross-linguistic influence' (Gass & Selinker, 2001:119). 'Cross-linguistic influence' contrasts with the older term, 'transfer'. For Kellerman and Sharwood Smith (1986), 'transfer' refers to the mechanical carryover of linguistic items and structures from the L1 to the L2 while 'cross-linguistic influence' incorporates 'transfer' as well as other ways in which the native language might influence second language acquisition, such as leading to avoidance of L2 structures and influencing the rate of L2 learning. Following Kellerman and Sharwood Smith (1986), in support of a mentalist/cognitive framework for second language acquisition and creative application of the influence of the native language, I choose to use the terminology, 'cross-linguistic influence', rather than 'transfer', in this study.

2.3.1. The Role of Universal Grammar versus the Native Language

In the sections immediately following, current debates regarding cross-linguistic influence are presented. These debates have been carried out largely within the field of Second Language Acquisition. The present work addresses issues raised in these SLA debates. Following these sections, the reader will find a presentation of a variety of contributions to the study of cross-linguistic influence largely made by sociolinguists.

2.3.1.1. Universal Grammar

The concept of Universal Grammar was created in response to the problem of explaining how children are able to acquire their first languages, with all of their grammatical complexities, in a short period of time and only on the basis of a limited amount of L1 input. Universal Grammar is a special nativist approach. Special nativism maintains that there is a specific mechanism in learners' brains designed for language learning. These special principles for language learning are thought to be used specifically for language learning and not for other cognitive endeavors (Gass & Selinker, 2001:168). According to Chomsky (1975:29, cited in Gass & Selinker, 2001:173), Universal Grammar (UG) is "…the system of principles, conditions, and rules that are elements or properties of all human languages."

The concept of Universal Grammar has its origins in the theory of Government and Binding, also known as the framework of Principles and Parameters. Lakshmanan (1994:1) explains, "Within Government and Binding (GB) theory, specific proposals (based on an investigation of adult grammars) have been put forth regarding the properties of Universal Grammar (UG), which are believed to constrain all natural languages."

A relatively recent development within GB theory is the notion of Universal Grammar as a parameterized system. Lakshmanan (1994:5-6) explains, "The notion of UG as a

parameterized system is intended to explain how the child arrives at the grammar of a language on the basis of insufficiently rich and precise input *and* to account for the diversity of possible human languages." According to this recent theoretical development, a child learning his/her first language is thought to be born with immediate access to all of the principles of Universal Grammar. When the child is exposed to normal L1 input, he/she then may 'set' each of the UG parameters in his/her brain at the values that correspond to those which are correct for the particular L1 being learned. Lakshmanan (1994:7) goes on to explain, "Certain features of the input are said to function as 'triggers' that facilitate the setting of a particular parameter of UG."

2.3.1.2. Models of Adult Second Language Acquisition

Very recently, the role of cross-linguistic influence from the native language in second language acquisition has been framed in comparison with the influence of Universal Grammar. While Universal Grammar has been assumed to operate in and facilitate child first language acquisition, it is only very recently that its application to second language learning has been investigated.

Two important competing hypotheses today are the 'Fundamental Difference Hypothesis' and the 'Access to UG Hypothesis'. The Fundamental Difference Hypothesis proposes that child first language acquisition is fundamentally different from adult second language acquisition. Furthermore, it proposes that adult second language learners do not have access to Universal Grammar but may apply only those language universals present in their L1 to their second language acquisition (Bley-Vroman 1989; Schachter 1988). The Access to UG Hypothesis, on the other hand, argues that Universal Grammar, the innate language facility, is operative in

second language acquisition and limits the grammars of both child first language learners and second language learners similarly (Gass & Selinker 2001).

White (2000, cited in Gass & Selinker, 2001:176) has outlined five possible positions with respect to access to Universal Grammar and the role of the native language in *adult* second language acquisition. These are as follows (adapted from White 2000):

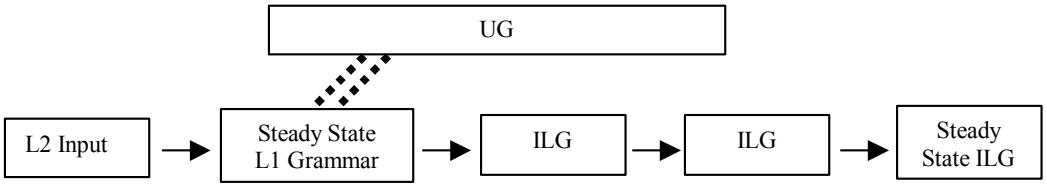


Figure 2. White's first model (2000:176), 'Full transfer/partial (or no) access'

According to this first position, adult second language learners come to the task of learning a second language having already attained the L1 final state of knowledge, the 'Steady State L1 Grammar'. These learners may access the principles and parameters of Universal Grammar only through the L1. If a principle of UG is not found in the L1, it will not be available to the second language learner. In effect, position one represents the Fundamental Difference Hypothesis, described above. Therefore, position one assumes that errors in the adult second language learner's linguistic production must be attributed to cross-linguistic influence of the L1. Also, it is important to notice that the final product of second language learning according to this first position is a 'Steady State ILG (Interlanguage Grammar)' rather than the L2 itself.

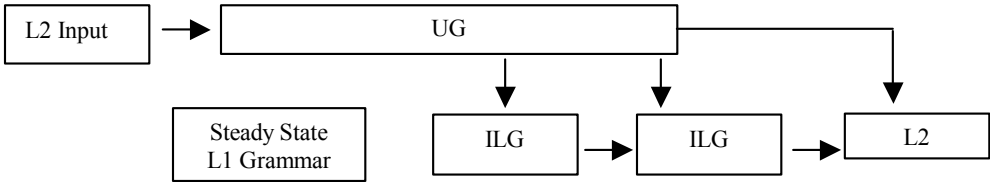


Figure 3. White's second model (2000:176) 'No transfer/full access'

According to this second position, the starting point for second language acquisition is Universal Grammar. In this model, the native language plays no role in the acquisition of the second language. Therefore, according to this second position, no cross-linguistic influence would occur and no learner errors could be attributed to the influence of the native language. Here, second language acquisition proceeds in the same way as first language acquisition. This position supports Dulay and Burt's 'L1 = L2 Hypothesis', described above. It is important to notice that the final outcome of position two is the L2.

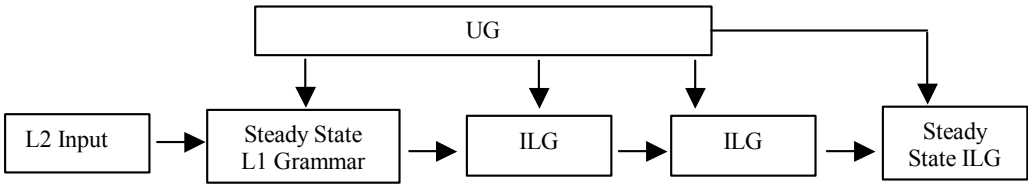


Figure 4. White's third model (2000:176) 'Full transfer/full access'

According to position three, the starting point for acquisition is the final L1 state. If the L1 does not have the principles and parameters that are necessary in learning the L2, the learners may access UG. Depending on the learner's native language, learning the L2 and the L2 grammar will differ. Here again, the final outcome of learning is a 'Steady State ILG' rather than the L2.

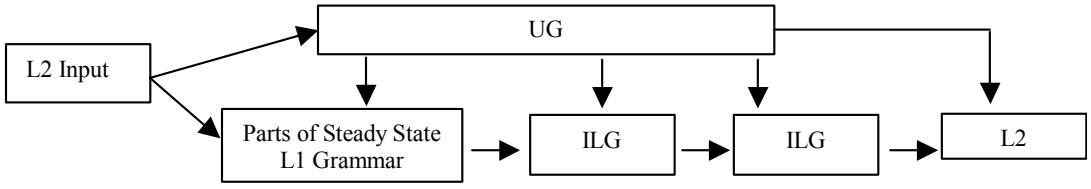


Figure 5. White's fourth model (2000:176) 'Partial transfer/full access'

According to position four, both the L1 and UG are available to the adult second language learner simultaneously. However, different principles and parameters will be available through UG and through the L1. The final product here is the L2.

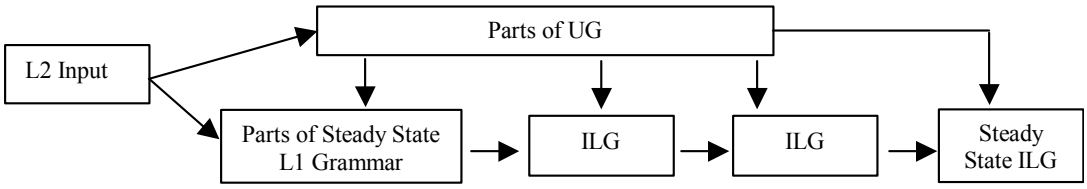


Figure 6. White's fifth model (2000:176) 'Partial transfer/partial access'

According to position five, only parts of UG and parts of the L1 will be simultaneously available to the adult second language learner. The final product will be a 'Steady State ILG'.

2.3.1.3. Child Second Language Acquisition

While considering opposing hypotheses and positions regarding the influence of the native language and access to Universal Grammar such as those discussed above, it may be important to distinguish between adult and child second language learners. Lakshmanan (1994:19) states, "In contrast to the adult L2 learner, the child L2 learner has largely been ignored in UG based SLA research." White's (2000) five positions discussed above are models of *adult* second language acquisition. The question remains whether any of her five positions may be applied to the situation of child second language acquisition.

THE CRITICAL PERIOD

According to Foster-Cohen (1999:7-8), child second language acquisition is "acquisition by individuals young enough to be within the critical period but yet with a first language already

learned". Lenneberg (1967, cited in Lakshmanan, 1994:14) was the first to propose the notion of a biologically-determined 'critical period' for language acquisition. "According to Lenneberg, the beginning stage of the critical period is restricted by lack of maturation. Its termination is associated with functional changes in the brain such as the loss of brain plasticity and specialization of brain functions to one hemisphere" (Lakshmanan, 1994:14).

The strong version of the critical period hypothesis states that human beings may only acquire a first language if they are exposed to it before puberty. According to the weak version, "…while some language learning is possible after puberty, native-like abilities will be unachievable and the process of language development will become more irregular and fall further short of native levels of achievement (the later the age of onset)" (Lakshmanan, 1994:14).

Long (1990, cited in Lakshmanan, 1994:15) has found evidence in support of an operative critical or 'sensitive' period for both first and second language acquisition. Furthermore, according to Long (1990, cited in Lakshmanan, 1994:15), "…it is impossible to achieve native-like competence in phonology after the age of six; likewise, the acquisition of morphology, syntax and semantics appear to be difficult starting later than the early teens."

CHILD SUCCESS IN SECOND LANGUAGE LEARNING

Lakshmanan (1994:19) cites a number of authors who agree that "…child L2 learners, unlike adult L2 learners, are typically successful with respect to ultimate attainment of the target L2", including Krashen, Long and Scarcella (1979), Felix (1985), Johnson and Newport (1989), and Larsen-Freeman and Long (1991). Also, according to Krashen, (cited in Gass & Selinker, 2001), the 'Affective Filter', which explains incomplete L2 knowledge in adults, is not operative in young children.

Foster-Cohen (1999:161) states that the remarkable success of children learning a second language "…has suggested to many researchers that second language acquisition by children within the 'critical period' shows the same kind of success as first language acquisition." In other words, it is likely that the authors referred to by Foster-Cohen (1999:161) would support Dulay and Burt's (1974) L1=L2 Hypothesis for the case of child L2 acquisition. Furthermore, it is likely that these authors would also support either White's (2000) second position, 'No transfer/full access', or fourth position, 'Partial transfer/full access', in the case of child second language acquisition. Both the second and fourth positions predict that the second language learner will end up with the target L2. Therefore, child L2 learners would be predicted to have full access to Universal Grammar. Cross-linguistic influence from the first language would play either no role or only a small, secondary role in second language acquisition. Lakshmanan (1994:20-1), sums up this perception when he states the following:

> The success on the part of children in acquiring a second language, when compared to the incomplete learning on the part of the adult L2 learners has been generally taken to mean that Child L2 = Child L1. However, this view ignores the fact that the child L2 learner has previous knowledge of another language – the L1.

Ervin-Tripp (1974), Milon (1974), and Ravem (1968, 1974) (all cited by Gass & Selinker, 2001:101) support the Child L2 = Child L1 hypothesis. Larsen-Freeman (1975) and Hakuta (1974) (cited by Gass & Selinker, 2001), on the other hand, disagree with this view and present evidence of cross-linguistic influence of the native language in child second language acquisition. McLaughlin (1978b) claims that there is no influence from the native language in child second language acquisition unless the child is isolated from peers who speak the target language natively. However, Wode (1976, cited in Gass & Selinker, 2001) has found evidence to contradict McLaughlin's claim.

A 'FLEXIBLE' STATE L1 GRAMMAR

Another important issue worth raising is that all of White's (2000) five positions for adult second language acquisition assume the presence of a 'Steady State L1 Grammar'. The question remains whether children come to the task of second language learning with a complete and intact 'Steady State L1 Grammar' or whether they are at the stage of having something like a *Flexible* State L1 Grammar. At what level of maturity do human beings achieve a 'Steady State L1 Grammar'? According to Lakshmanan (1994:12), in contrast with adult L2 learners, child L2 learners have "…less extensive knowledge about the language specific facts of the L1…"

'DIRECT ACCESS', 'INDIRECT ACCESS' AND 'NO ACCESS'

Lakshmanan (1994:21-2), following Sharwood Smith (1988), has outlined three possibilities regarding the question of child access to UG: 'direct access', 'indirect access', and 'no access'.

'Direct Access' to UG

For child L2 learners with 'direct access' to UG, the process of acquiring the L2 would be carried out in exactly the same way as the process of acquiring the L1. In other words, children acquiring their second language would have access to all of the principles and parameters of UG. Here, the initial state of the child L2 learner would be perceived as identical to that of the L1 learner. In other words, rather than beginning L2 acquisition with the UG parameters set to the L1 values, the child would start anew with the parameters set to the 'default values'. This process would be 'recreative' in that child L2 learners would be creating the L2

grammar in exactly the same way as they previously created the L1 grammar. In this case, the L1 would exert no influence on L2 learning. Furthermore, a child learning a particular target language as his/her L2 would be expected to develop in exactly the same stages as an L1 learner of the target language.

'Indirect Access' to UG

Assuming that child L2 learners have 'indirect access' to UG, while learning the L2, they must re-set the parameters of UG from the L1 values to the appropriate L2 values. This process of 'resetting' UG parameters has been referred to as 'reconstructive'.

'No Access' to UG

Finally, according to the 'no access' view, since UG is no longer available to the child L2 learner, L1 parameter settings may not be 'reset' but remain as a template for the L2. Cross-linguistic influence and general learning principles would be the only resources available for the child to use in building the grammar of the second language. Due to the lack of UG access, the language produced by the child L2 learner would be expected to contain some 'unnatural' characteristics that could never form part of the grammar of any human first language.

2.3.2. Sociolinguistic Investigations in Cross-Linguistic Influence

Unlike studies in the field of Second Language Acquisition, current studies within the field of Sociolinguistics involving language contact and cross-linguistic influence have not usually focused on the question of a second language learner's resources for acquiring a second language: access to Universal Grammar and knowledge of the first language. Rather, an

important focus of sociolinguistic approaches to the study of cross-linguistic influence is the investigation of extralinguistic factors that may influence second language acquisition. Knowledge of sociolinguistic approaches to the study of cross-linguistic influence has informed the methodology of the present work.

2.3.2.1. Constraints on Cross-Linguistic Influence

An ongoing debate among sociolinguists involves whether there are any constraints on cross-linguistic influence. In her (1989:171) work, Silva-Corvalán states that language transfer may occur on all linguistic levels, including phonological, morphological, syntactic, lexical, and semantic. Later, she defines language transfer as "...the incorporation of language features from one language into another, with consequent restructuring of the subsystems involved... (1995: 7-9)."

However, in her (1994:166) work, Silva-Corvalán takes the following position: "The syntactic system of grammars is remarkably impermeable to foreign influence". According to Silva-Corvalán (1994:135), "…the permeability of a grammar to foreign influence…(depends on) the existence of superficially…parallel structures in the languages in contact". In this work, Silva-Corvalán (1994:166) defines 'transfer' in the following way:

> Transfer may occur when bilinguals (unconsciously) identify a surface string in the secondary system with one in the primary system and, in using it, subject it to the discourse-pragmatic rules of the primary language. This shows that languages are permeable at the discourse-pragmatic level…Transfer may occur at the lexico-syntactic level when bilinguals (unconsciously) identify a lexical item in the secondary language with one in the primary language and subject it to the subcategorization of the item in the primary language.

In general, Silva-Corvalán (1994:134-5) finds the structure of the languages in contact to govern "…the introduction and diffusion of innovative elements in the linguistic systems".

Thomason and Kaufman (1988:14) claim that all realms of language may be influenced by other languages. In her more recent work, Thomason (2001) provides further support for her and Kaufman's (1988) conclusion and finds that anything may be adopted by one language from another. Thomason explains, "Various claims can be found in the literature to the effect that this or that kind of feature is unborrowable, but counterexamples can be found (and have been found) to all of the claims that have been made to date" (2001:63). For example, Thomason explains that clear counterexamples have been found contradicting the claim that grammatical interference is confined to features that fit well typologically with the structure of the receiving language (2001:63). Furthermore, Thomason shows that the commonly proposed constraint that contact-induced change always makes the receiving language system less marked is also invalid. In other words, contact-induced change does not always lead to simplification but may instead lead to complication. Thomason cites examples of the borrowing of marked features to support this claim (2001:64-5).

2.3.2.2. The Influence of Social Factors on Cross-Linguistic Influence

According to Thomason (2001), the influence of social factors is a major reason why exceptions have been found to all proposed linguistic constraints on language contact. She explains, "…the linguistic factors can be overridden by social factors pushing in an opposite direction" (2001:77). The social factor found to be the most influential according to Thomason is speaker attitude, which can be either a barrier or promoter of language change (2001:85). "Speakers' attitudes can and sometimes do produce exceptions to most of the generalizations (concerning linguistic constraints)…" (2001:77).

Another social factor mentioned by Thomason is intensity of contact. Generally, more intense language contact has been thought to predict the possibility for the occurrence of more cross-linguistic influence. Factors influencing the intensity of contact are identified as the duration of the contact period, the size of the populations of the two groups in contact, and whether one group has socioeconomic dominance over the other.

In his work, "Foreign Language Learning in a Multilingual Setting: The Predictability of 'the Mother Tongue Effect", Sammy Chumbow (1984:290) also finds sociolinguistic variables to play a major role in determining the degree of cross-linguistic influence a particular language may exert. He identifies these as (1) the functional role of the language for the subject's communication, (2) the subject's proficiency in his/her language, (3) how standardized the language is, (4) whether or not the language is used as a means of instruction in the subject's schooling, (5) the importance of the language as a means of learning the foreign language, (6) the social and geographical relations between the language and the target language, (7) the degree of similarity between the language and the target language in terms of phonology, morphology, syntax, and other structural systems, (8) the social prestige of the language, and (9) the language model presented to the students (1984:289-90).

Silva-Corvalán (1989:170) also recognizes the impact of social, extra-linguistic factors on the occurrence of cross-linguistic influence. She identifies some of these social factors as the subjective attitudes that bilingual speakers have toward each of their two languages, the subjective attitudes of the speech communities regarding the use and maintenance of the two languages, the relative specialization of the languages according to semantic domain and conversational topic, the conversational participants, and the number of bilinguals in the speech communities.

2.3.2.3. Language Attitude Studies of Bilingual Quechua-Spanish Speakers

As mentioned above, according to Thomason (2001:85), the social factor found to be the most influential on cross-linguistic influence is speaker attitude, which can be either a barrier or promoter of language change. A number of sociolinguists, a few of whose work I will discuss below, have examined the language attitudes of Peruvian Quechua-Spanish bilinguals.

In her study of the language situation in Alsace, Vassberg (1993:146) sums up the importance that language attitudes may have for speakers:

> …(language) attitudes… play a crucial role in the psychology of individual speakers and their use of language. For attitudes have been shown to have a profound effect on motivation to speak or learn a language; they are linked to views of identity and the desire- or lack of desire- for group membership and solidarity. Attitudes are affected by – and comprise- values and stereotypes held by both speakers and non-speakers of any given language or language variety.

Nancy Hornberger (1989) has carried out extensive language attitude studies among bilingual Quechua-Spanish speakers of Puno, Peru. One of the conclusions of her investigation is that her study participants ignore Quechua while focusing all of their attention on the acquisition of their second language, Spanish (1989:123). Furthermore, Hornberger (1989:124) has noted that often, young native Quechua speakers who leave their home communities for any extended period of time stop speaking Quechua. Hornberger hypothesizes that this may occur through the effects of being immersed in largely monolingual Spanish-speaking environments, on the coast of Peru and in large cities. Quechua speakers are forced to acquire Spanish in order to survive and function in these new social environments.

Hornberger also states that it is not uncommon for native Quechua speakers living in large cities to deny that they speak Quechua (1989:124). After inquiring among her study participants as to the reasons for such denial, she learned that these speakers admit that they are ashamed of knowing Quechua and that they are focused on achieving success within Peruvian

society, which is dominated by Spanish (1989:125). In other words, for these speakers, becoming a Spanish speaker means not publicly recognizing the value of Quechua.

Hornberger (1989:127) identifies functional specialization of Quechua and Spanish regarding prestige, social domains of use, and communication channel. According to Hornberger (1989: 127), her study participants believe that Spanish has higher prestige than Quechua, is more important than Quechua, and is a superior language. As far as specialization of social domains, the speakers interviewed by Hornberger associate Spanish with progress, education, government, work, industry, bureaucracy, and commerce. Furthermore, these speakers associate Spanish with literacy and the written channel of communication.

Hornberger found that Quechua, on the other hand, is associated with oral communication. The primary value of Quechua for these participants emerges from its association with the home community and informal, private, or humorous domains. Hornberger's study participants claimed to use Quechua for telling jokes, stories, riddles, and for nicknames.

In their (1994) study, Von Gleich and Wölck compare the results of two nearly identical language attitude studies carried out in 1969 and in 1979 among bilingual Peruvian Quechua-Spanish speakers. Both studies employed the methodology of the subjective reaction test. The authors played recordings of narratives in Quechua and in Spanish to their study participants and asked them to rate the recorded speakers using a set of evaluative terms. The authors also investigated functional specialization for the two languages in terms of appropriate interlocutors, oral genres, and social domains.

Von Gleich and Wölck found interesting differences in the results of the two studies, separated by a decade. In the 1969 study, almost 90% of the respondents were convinced that

Quechua should be taught in school, while only 70% of the 1979 respondents thought this should be the case. The most striking change in the results noticed by the authors is the "narrowing of the gaps between the evaluation of the two languages and their speakers along almost all dimensions" (1994:46). The authors interpret this to mean that Peruvian Quechua-Spanish bilinguals have moved toward a "more stable and balanced stage of Quechua-Spanish bilingualism with less clear separation between domains of usage" (1994:47). Von Gleich and Wölck noted, however, that Spanish was beginning to dominate several domains. Von Gleich and Wölck interpret this change in results as evidence of a "growing tendency of language shift from Quechua-Spanish bilingualism to Spanish monolingualism" (1994:48-9).

2.4. Quechua-Spanish Cross-Linguistic Influence

The Quechua language differs from the Spanish language in many ways. In his work, *Gramática Quechua*, Angel Marroquín-Llamoca (1990) characterizes the written and spoken variety of Quechua used in the Peruvian cities of Cuzco and Puno. In contrast with Spanish, Quechua is an agglutinating language that forms its words by attaching multiple suffixes onto the ends of lexical roots, lacks both definite and indefinite articles, lacks a grammatical system of gender, and has completely regular verb conjugation patterns (Marroquín-Llamoca, 1990:21-3). The very presence of these differences has inspired some language contact scholars to investigate whether certain language structures of the Spanish of Quechua-Spanish bilinguals might undergo cross-linguistic influence and be adapted in order to become more like Quechua language structures. In fact, Quechua to Spanish cross-linguistic influence has been claimed to occur on all levels, including the phonological and morpho-syntactic.

2.4.1. Phonological Cross-Linguistic Influence

Quechua differs from Spanish in terms of phonology. Throughout this work, I choose to represent the Cuzco Quechua phonemes using the orthography published in the Peruvian Ministerial Resolution No. 4023-75-ED on the basic alphabet of Quechua (Morató Peña, 1995:289). In his *Gramática Quechua, Cuzco Collao* (2001:33-4), Antonio Cusihuaman describes the Quechua consonantal system as consisting of four simple voiceless stops, /p, t, k, q/, with /q/ being the symbol for the uvular voiceless stop consonant, the affricate, /ch/, the aspirated versions of the four stops plus the affricate, /ph, th, kh, qh, chh/, the glottalized, or ejective versions of these stops and affricate, /p', t', k', q', ch'/, three voiceless fricatives /s, sh, h/, three voiced nasals /m, n, ñ/, two voiced laterals /l, ll/, one voiced vibrant /r/, and two voiced semi-consonants /w, y/. The consonantal system of Spanish, unlike Quechua, lacks a uvular stop /q/, does not include aspirated or ejective stops or affricates, includes voiced stops /b, d, g/, and includes the voiceless labio-dental fricative /f/.

Due to the fact that Quechua and Spanish do not share the same phonemic inventory and due to differences between the Quechua and Spanish phonological systems, language contact scholars have claimed that native Quechua speakers with a lower proficiency in Spanish have been observed to produce Spanish with a Quechua accent. In other words, while speaking in Spanish, Quechua native speakers have been thought to systematically phonologically restructure, or change the pronunciation of Spanish words, allowing rules of Quechua phonology to influence their Spanish. Furthermore, the result of this phonological restructuring has been thought to have much in common with the way that Quechua speakers have been found to phonologically adapt Spanish loan words into Quechua.

One example of such phonological cross-linguistic influence is that, while speaking in Spanish, native Quechua speakers have been found to substitute the aspirated voiceless bilabial stop /ph/ for a Spanish phoneme that does not occur in Quechua, the voiceless labio-dental fricative /f/. Mario Mamani P. and Virginia Chávez P. have found this process to occur with Spanish borrowings in Quechua. They claim that the Quechua /ph/ may be substituted for the Spanish /f/ in every position in which it occurs (e.g. Spanish: *fácil*, [fasil], 'easy' becomes Quechua *phasil*, [phasil]) (Mamani & Chávez, 2001:84).

2.4.2. Morphosyntactic Cross-Linguistic Influence

According to Lee (1997:3), morphosyntactic cross-linguistic influence occurring from Quechua to Spanish has been much less-often studied than have phonological and lexical influence. While discussing a variety of ways in which Quechua has been found to morphosyntactically influence Spanish, I will draw on four principle sources, some of which have already been cited above: *Resultados lingüísticos del contacto quechua y español*, by Francisco Carranza Romero (1993), *El Español de América* by John M. Lipski (1996), *Morfosintaxis amerindias en el español americano, Desde la perspectiva del quechua*, by Tae Yoon Lee (1997), and *Estudios de Lingüística Andina* by Germán de Granda (2001). Lipski, Lee, and de Granda all make claims regarding the morphosyntactic influence of Quechua on Spanish occuring throughout South America. The claims presented by these three scholars have all been supported by the data they have collected among Quechua and Spanish speakers.

Romero, on the other hand, draws claims only regarding the morphosyntactic influence of Quechua on Spanish occurring in Peru. Romero's work also differs from the works of the other three scholars mentioned in that, in addition to using data collected from Quechua and Spanish

speakers, he chooses to study the Quechua to Spanish morphosyntactic influence found in a variety of textual sources. These texts include *El Primer Nueva Coronica I Buen Gobierno*, written by chronicler, Felipe (Phelipe) Guamán Poma de Ayala, for the Spanish monarch, Felipe III, from the period of 1585 to 1613 on pre- and post-contact Andean life, three religious documents (two manuscripts and a published book) used for prayer in QI-speaking areas, authored by priests and church cantors in 1948 and 1957, and more recent texts, such as personal letters written from 1983 to 1989, song books, and some recently-published Peruvian literary works, including Clorinda Matto de Turner's *Aves sin nido* (1986), José María Arguedas' *Todas las sangres* (1985) and Ciro Alegría's *El mundo es ancho y ajeno* (1982) (Romero, 1993:160).

Because Romero finds very similar morphosyntactic influence phenomena to occur regardless of whether he is analyzing older texts, newer texts, or the speech of interviewed Quechua and Spanish speakers, while mentioning claims made by Romero, I do not distinguish among which of his sources the claims stem from.

2.4.2.1. Word Order

STANDARD SPANISH SVO BECOMES ANDEAN SPANISH SOV

I will start out with a discussion of the morphosyntactic influence of Quechua on Spanish in the case of word order. A number of language contact scholars have found evidence of the morphosyntactic influence of Quechua word order on Spanish. For example, in *Language Transfer: Cross-linguistic Influence in Language Learning,* Terrence Odlin (1989) examines the transfer of the syntactic property of word order. In his study of bilingual Quechua-Spanish speakers of Peru, he found that native Quechua speakers transferred the basic Quechua word order, SOV (Subject followed by Object followed by Verb), to their second language, Spanish,

which is widely considered to have an SVO word order. Romero (1993:191) echoes this claim in his work.

Lipski (1996:346) comes to the same conclusion as Odlin (1989) and Romero (1993) when he discusses syntactic cross-linguistic influence occuring from Quechua to Spanish among Peruvians. According to Lipski, some of the syntactic constructions used by native Quechua speakers while speaking Spanish differ enormously from panhispanic structures. Lipski recognizes that the word order, Object + Verb, a word order uncharacteristic of panhispanic Spanish, results in the Spanish of native Quechua speakers through cross-linguistic influence (1996:346). Lee further explains that in Quechua, the complements of the verb are placed before the verb, while in Spanish the opposite is true (Lee, 1997:53).

POSSESSIVE

Another example of morphosyntactic influence of Quechua on Spanish in the case of word order involves possessive constructions. In Quechua, the possessive structure is formed as follows: Possessor (+ genitive morpheme) + Possessed (+ possessive person morpheme). For example, in Quechua, *warmi-q wasi-n*, '(the) woman's house' is literally 'woman-(gen) house-(3rd person singular possessed)'. As the use of two possession morphemes is involved in the construction of the possessive, some linguists have referred to Quechua as having 'double possessives'.

Lee (1997:52) explains that in the Spanish of native Quechua speakers, as a result of morphosyntactic influence, double possessives are formed by the combination of a prepositional phrase headed by *de*, 'of' and the use of a possessive adjective. For example, Lee (1997:52)

cites the work of Escobar (1978:108) who provides us with the example, *de mi Pepe su silla*, 'my Pepe's chair', literally 'of my Pepe his chair'.

Lipski also notes the presence of double possessives in the Spanish of Quechua-Spanish bilingual Bolivian and Peruvian speakers. Lipski (1996:348) cites the following examples from the work of Stratford (1989:142) and Stark (1970:6): *de mi tío su casa es* 'it is my uncle's house', literally 'of my uncle his house (it) is' and *de alguna señora sus perros*, 'some woman's dogs', literally 'of some woman her dogs'. José Camacho and Liliana Sánchez note the same phenomenon among Peruvian Quechua-Spanish speakers in their paper, "'*De mi padre, su padre*': The Syntax of Word Order Transfer and Person Agreement in Andean L2 Spanish" (1996).

Romero (1993:180), who also notes this phenomenon among Peruvian Quechua-Spanish bilinguals, claims that Peruvian monolingual Spanish speakers also use the Quechua-influenced possessive structure. This would represent an instance of convergence of Peruvian Spanish toward Quechua.

2.4.2.2. Re-structuring the Spanish Verb

GERUND

A variety of phenomena have been observed in the Spanish of Quechua speakers throughout the 'Andean dialectal zone' involving the restructuring of the Spanish verbal system. Lipski notes that in Ecuador, bilingual Quechua-Spanish speakers have been found to employ the use of a gerund in order to avoid using conjugated verbs (1996:270). An example of this would be to use *¿Qué haciendo?*, literally 'What doing?', in the place of *¿Qué haces?*, 'What do you do?', literally 'What you do?'.

De Granda notes that in both northwest Argentina and in southern Colombia, bilingual Quechua-Spanish speakers have been found to use gerunds with a perfective meaning in place of past participles. De Granda provides the following examples: *la dejé pintando*, literally 'I left it painting', where standard Spanish would demand *la dejé pintada*, 'I left it painted', and *lo dejé escribiendo*, literally 'I left it writing', where standard Spanish would demand *lo dejé escrito*, 'I left it written' (2001:47).

Furthermore, Lipski notes that in Ecuador and in southern Colombia, Quechua-Spanish speakers have been found to form the imperative by using a conjugation of the Spanish verb *dar*, 'to give', plus a gerund. Lipski provides the following examples: *dame cerrando las puerta*, literally 'give me closing the (plural) door', in place of standard Spanish *cierra la puerta*, 'close the door', and *dame comprando unas espermitas*, literally 'give me buying some candles', in place of standard Spanish *compra unas velas*, 'buy some candles' (1996:269-70). Hurley (1995:48) also finds this use of *dar* plus a gerund among bilingual speakers of Ecuadorian Quichua and Spanish in Otavalo, Ecuador. Furthermore, Lee notes the tendency among bilingual Quechua-Spanish speakers to avoid conjugating the imperative by using the future tense in Spanish (1997:160).

Moreover, Lipski (1996:239) has observed that bilingual Quechua-Spanish speakers of Ecuador and southern Colombia use the combination of the conjugation of the Spanish verb *venir*, 'to come', plus a gerund in the following way: *vine comiendo*, literally 'I came eating', meaning *comí antes de venir*, 'I ate before coming'.

SUBJUNCTIVE

According to Romero (1993:193), Peruvian Quechua-Spanish speakers have been found to avoid using the subjunctive where it would occur in standard Peruvian Spanish, producing such constructions as the following: *Ojalá se* ***decide***, 'hopefully s/he decides (indicative)', in place of the standard, *Ojalá se* ***decida***, 'hopefully s/he decides (subjunctive)', and *no hay quien nos* ***atiende*** *en la casa*, 'there is no one to help (indicative) us at home', in place of the standard, *no hay quien nos* ***atienda*** *en la casa*, 'there is no one to help (subjunctive) us at home'.

De Granda also claims that due to morphosyntactic influence from Quechua, throughout the Andean area, bilingual Quechua-Spanish speakers have been found to replace the standard Spanish subjunctive with the conditional verb tense in some constructions (2001:109).

PERFECTS

Another case in which Spanish verb tenses have been found to be restructured by Quechua-Spanish speakers is that of the perfect tenses. Lee finds that bilingual Quechua-Spanish speakers may avoid the use of the present perfect tense by combining the phrase *todavía no*, 'not yet', with a Spanish verb conjugated in the present tense. For example, Lee explains, *Todavía no me devuelven los pesos*, 'They do not yet return the pesos to me', instead of the standard *Todavía no me han devuelto los pesos*, 'They haven't returned the pesos to me yet' (1997:157).

Reinterpretation of the Spanish perfects: the influence of Quechua *-mi/-n* and *-si/-s*

Speakers of Cuzco Quechua may employ one of the following three epistemic suffixes in their speech to express their attitudes toward knowledge or information: *-mi/-n*, *-si/-s*, and *-chá*. The Quechua clitic, *-mi/-n*, has often been thought to indicate that knowledge, or information, has been attained through direct experience. The Quechua clitic, *-si/-s*, on the other hand, has often been claimed to indicate that knowledge has been obtained through the means of language, or hearsay. The epistemic suffix, *-chá*, has been found to indicate conjecture.

According to Carol A. Klee and Alicia M. Ocampo (in Silva-Corvalán 1995:52), Calca (Peruvian) Quechua-Spanish bilinguals reinterpret the meanings of the present perfect and past perfect verb tenses in Spanish so as to express an epistemic distinction, conveying "...whether one has been a direct witness to an event or has received information about it indirectly". For these Quechua-Spanish bilinguals, the present perfect verb tense in Spanish was claimed to be used to convey that information had been obtained through being a direct witness, while the past perfect verb tense in Spanish was claimed to be used to convey that information had been obtained indirectly. In his description of the Quechua-influenced Spanish of Bolivia and Peru, Lipski mentions the same phenomenon (1996:214,348).

Anna María Escobar's "Contrastive and Innovative Uses of the Present Perfect and the Preterite in Spanish in Contact with Quechua" (1997) corroborates Klee and Ocampo's (1995) claims. Escobar finds that native Quechua speakers of Cuzco use the present perfect verb tense in Spanish in order to demonstrate that the speaker has experienced or witnessed the event in question. Escobar attributes this 'evidential use' of the present perfect to the influence of the *-mi/-n* Quechua epistemic clitic. In contrast, Escobar claims, "In Spanish in contact with Quechua, the pluperfect indicates that the information given is not first-hand, i.e. the pluperfect

is used to mark reported information" (1997:865). Escobar attributes the use of the pluperfect tense to the influence of the *-si/-s* Quechua epistemic clitic.

Reinterpretation of the Spanish perfect tenses: the influence of Quechua *-rqa-* and *-sqa-*

In contrast to Escobar's attribution of the claimed epistemic uses of the Andean Spanish present perfect and pluperfect to the influence of the Quechua epistemic clitics, *-mi/-n* and *-si/-s* respectively, Lee (1997:41) attributes this example of morphosyntactic cross-linguistic influence from Quechua to Spanish to the influence of the Quechua past tense verbal forms, *-rqa-* and *-sqa-*. According to Lee, following Cusihuamán (1976:170), in Quechua, the *-rqa-* past tense form refers to concrete, terminated action that was realized with the direct participation of, or under the conscious control of the speaker. The Quechua *-sqa-* past tense form, on the other hand, is described by Lee as referring to any real or supposed action that has occurred without the direct participation of the speaker or under the unconscious control of the speaker (1997:41).

However, Lee (1997:102-3) indicates that there is disagreement in the literature as to whether the use of *-rqa-* in Quechua correlates with the use of the present perfect, past perfect, or preterite Spanish verb tenses. This same disagreement exists with reference to the correlation of the use of *-sqa-* in Quechua with the various Spanish verb tenses.

According to Germán de Granda (2001:124-5), in Quechua, epistemology is conveyed simultaneously by the two different methods described above: the use of the suffixes, *-mi/-n* (for direct), *-si/-s* (for indirect), and *-chá* (for conjecture), along with the two Quechua past tense verb forms, *-rqa-* (for direct) and *-sqa-* (for indirect). However, de Granda agrees with Lee in attributing the restructuring of the Spanish perfect tenses to the influence of the Quechua past

tense verbal forms, *-rqa-* and *-sqa-*. De Granda refers to this restructuring as a 'function calque' (2001:152-3).

The findings of Sabine Dedenback-Salazar Sáenz in her article "Point of View and Evidentiality in the Huarochirí Texts (Peru, 17th Century)" (in Howard-Malverde, 1997), cast doubt on de Granda's claims. In her examination of the epistemic forms used in the Huarochirí texts, "the oldest known source on Andean culture written in an Andean language", she observes, "… in the chapters that relate a coherent narrative, usually of mythical character, we find the combination of the reportative evidential suffix *–si* and the *–rka-* past tense…"(p.152). As de Granda claims that the use of *-si/-s* indicates that information has been obtained through indirect means and that the use of *-rqa-* indicates that information has been obtained through direct means, de Granda would be unable to account for the combination of the two epistemic markers.

'*Dice*' Epistemic Calque

Besides the Quechua epistemic system's restructuring of the Spanish perfect verb tenses in order to convey epistemic meaning, according to Lipski (1996:214,348 for Bolivia and Peru), and de Granda (2001:127 for Peru, Ecuador, and Argentina), the Spanish *dice/dicen/diciendo*, 's/he says/they say/saying', may be used as calques of the Quechua suffix *-si/-s* in order to express the fact that information has been obtained indirectly.

De Granda also observes that in regions of Ecuador, Peru, and Argentina, where the use of the *-si/-s* suffix among Quechua speakers is gradually disappearing, speakers may instead use conjugations of the Quechua verb *niy*, 'to say', in place of the *-si/-s* suffix (i.e. *nin* = 's/he says' and *ninku* = 'they say'). De Granda suggests that, in this case, the Quechua speakers are using conjugations of *niy* as calques of the Spanish calques, *dice/dicen* (2001:127).

According to de Granda, the only Quechua clitic that has been transferred to Andean Spanish as a function calque is *-si/-s*. Therefore, claims de Granda, the other epistemic clitics in Quechua, *-mi/-n* and *-chá*, do not exert cross-linguistic influence on Andean Spanish in any way (2001:153-4).

'*Pues*' Epistemic Calque

The findings of Virginia Zavala (2001) contradict de Granda's (2001) claim that *-si/-s* is the only Quechua epistemic clitic exerting cross-linguistic influence on Andean Spanish. According to Zavala in her article, "Borrowing evidential functions from Quechua: The role of *pues* as a discourse marker in Andean Spanish" (2001), Ayacucho (Peruvian) bilingual Quechua-Spanish speakers may use the Spanish conjunction, *pues*, 'well; then; since', in order to communicate that information has been obtained directly. Furthermore, Zavala maintains, due to cross-linguistic influence of the Quechua agglutinative structure, the discourse marker, *pues*, "…has been transformed and restructured into an item which functions almost as a 'suffix', attached to various parts of speech" (2001:1004). According to Zavala, these speakers are using *pues* in Spanish where they would be using the *-mi/-n* suffix in Quechua. In other words, she is claiming that *pues* is used as a calque for *-mi/-n*.

2.4.2.3. Agreement

NUMBER, GENDER, AND PERSON AGREEMENT

Romero (1993:173-177 for Peru), Lipski (1996:214 for Bolivia), and Lee (1997:157-160 for Andean Spanish) all mention a lack of morphological agreement of number and gender as characteristic of the Spanish spoken by Quechua speakers. Romero attributes this lack of

agreement to the facts that Quechua does not encode gender grammatically and only has one second person singular pronoun, *qan*, where Spanish has two, one informal, *tú*, and one formal, *usted* (1993:259-60, 325).

ARTICLE AND PREPOSITION AGREEMENT

Romero (1993:182-6 for Peru), Lipski (1996:348 for Peru), and Lee (1997:157-160 for Andean Spanish) all mention the deletion or nonstandard use of articles and prepositions as characteristic of the Spanish spoken by Quechua-Spanish speakers. Romero attributes these phenomena to the fact that Quechua lacks articles and some prepositions (1993:182-6). While speaking Spanish, Lee (1997:157-160) finds bilingual Quechua-Spanish speakers to delete prepositions, add superfluous prepositions, and misuse one preposition for another.

OBJECT PRONOUN AGREEMENT

Romero (1993:256-7 for Peru), Lipski (1996:195,214,269,345-7 for Peru, Bolivia, Ecuador, and Argentina), Lee (1997:74 for Andean Spanish) and de Granda (2001:77 for Peru, Bolivia, Ecuador, and Argentina) have all observed nonstandard usage of the Spanish direct, *lo, la, los, las*, and indirect, *le, les,* object clitics. Each of these scholars has found that a lack of concord in the use of these object clitics is characteristic of the Spanish of Quechua-Spanish bilingual speakers. Furthermore, they observe, one object clitic, *lo*, in the case of Peru, Bolivia, and Argentina and *le* in the case of Ecuador, is generalized and employed as a clitic no matter what the gender or number of the particular object in question is. Lipski (1996:195) provides the

following Argentinian example from Rojas (1980:83): *Lo quiere mucho a su hijita* in place of the standard, *La quiere mucho a su hijita*, 'S/he loves his/her little daughter very much'.

Lipski also explains that in the Andean dialectal zone, the direct object clitics may be used redundantly, where they would not be used in standard Spanish. Lipski (1996:214) provides the following Bolivian example from Stratford (1989:119): *Ya lo he dejado la llama*, literally 'I have already left it, the llama', in place of the standard, *Ya he dejado la llama*, 'I have already left the llama'. In the following example from Stratford (1989:120 in Lipski, 1996:214), the object clitic has been placed both pre- and post-verbally, where the parentheses represent that in standard Spanish, one or the other of the clitics would be omitted: *Lastimosamente, no (la) he podido conocer(la)…*, 'Unfortunately, I haven't been able to meet her'. Lipski also finds that null direct objects are common in the Spanish of bilingual Quechua-Spanish speakers of Peru and Ecuador (1996:269,347).

2.4.2.4. Calques

SPANISH DIMINUTIVE -ITO/A CALQUE

In Quechua, the first-person singular possessive suffix, *-y*, is commonly added onto the ends of Quechua nouns in order to denote affection. The use of this suffix has been calqued in Spanish with the Spanish diminutives, *-ito/a* (1996:213-14, 238,268 for Bolivia, Colombia, and Ecuador). In Lipski's example, *corazoncitoy*, 'my dear little heart', we find a combination of the Spanish diminutive, *-ito* along with the transferred Quechua suffix, *-y* (1996:213-214).

'NO MÁS' CALQUE

Lee explains that in Andean Spanish, the Spanish expression, *no más*, 'no more', has been restructured as a calque of the Quechua suffix, *-lla* (1997:157-160). In Andean Spanish, *no más* may take on the meaning of 'only', as in the example, *Hace dos días no más que se fue*, 'It has only been two days since s/he went away', the meaning of 'not only', as in the example, *No había no más que carpas*, 'There were not only tents', an intensifying meaning, as in *Así es no más*, 'That's (just) it', an emphatic meaning, as in *Sigan no más abriendo el mismo*, 'Go ahead and keep on opening (it)', and a softening meaning, as in *¿Qué no más has traído?*, 'What (little thing) have you brought?'. The Quechua suffix, *-lla*, carries all of these meanings.

'YA' CALQUE

As in the case of the Spanish expression, *no más*, Lee finds that the Spanish word, *ya*, 'already', has also been restructured as a calque of a Quechua suffix, in this case *-ña* (1997:157-160). In Andean Spanish, *ya mismo* takes on the meaning, 'right now' as in the example, *Te largas ya mismo de mi casa*, 'Get away from my house right now'. *Desde ya* takes on the meaning of 'for now', such as in the example, *Desde ya me olvido*, 'I forget for now'. *Es ya* takes on the meaning, 'immediately', as in the example, *Si se decide es ya*, 'If s/he decides immediately'. Finally, in order to express the Spanish meaning, 'already', *ya* is often placed both before the verb and sentence-finally, such as in the example, *Ya me cambió nombre ya*, 'S/he already changed my name for me'.

2.4.3. Summary

In summary, although Quechua is currently spoken over a large geographical area, covering portions of Peru, Bolivia, Ecuador, Colombia, Argentina, Chile, and Brazil, because the many Quechua dialects are generally homogeneous, similar morphosyntactic influence phenomena have been found to be exerted by Quechua on the Spanish spoken by Quechua-Spanish bilinguals, which I am referring to broadly as Andean Spanish.

Two examples of morphosyntactic contact phenomena described above are the cross-linguistic influence of Quechua word order on Andean Spanish, making it SOV rather than standard Spanish SVO, and the case of possessive constructions. I have also discussed a variety of ways in which the Spanish verb tenses have been found to be restructured in Andean Spanish, in the cases of the gerund, the subjunctive, and the perfect tenses. Furthermore, I have examined number, gender and person agreement, use of articles and prepositions, and the use of direct and indirect object clitics in Andean Spanish. Finally, I presented brief descriptions of Andean Spanish calques of Quechua suffixes, in the case of the diminutive, *-ito/a*, the expression, *no más*, and the lexical item, *ya*.

2.5. Epistemology

> What is knowing? What kinds of beings have knowledge? What sorts of things are known?...For two thousand years philosophers have asked and attempted to answer these questions. This ongoing discussion constitutes the subject matter of the philosophical area called the theory of knowledge, or Epistemology (Lucey, 1996:9).

The notion of 'epistemology' has its origins in the field of philosophy. Recently, its application to the field of linguistics has been explored. In the linguistic literature, there is debate as to the exact definition and nature of the terms, 'epistemic' and 'evidential'. According

to Anna María Escobar (2000:213), Lyons (1977), Givón (1982), Bybee (1985), Palmer (1986), and Willett (1988) propose that epistemology includes two subsystems, one of judgment, which makes reference to the knowledge, opinions, and attitude of a speaker toward his/her utterance, and one of evidentials, which makes reference to the information source for an utterance (e.g. first-hand information, second-hand information, etc.).

In the introduction to their often-cited work, *Evidentiality: The Linguistic Coding of Epistemology* (1986:viii), editors Wallace Chafe and Johanna Nichols describe the heterogeneous perspectives of the authors published in their volume as representing a stage of exploration in the study of evidentials. Here, we may assume that Chafe and Nichols are using the term, 'evidential' as a synonym for 'epistemic'. Chafe and Nichols explain that at the time of their publishing, the time was "not yet ripe" for the presentation of a single, unified approach to evidentiality (1986:viii). Chafe and Nichols explain that, "The term 'evidential'…now covers much more than the marking of evidence per se. We do not wish, for the moment at least, to suggest what the boundaries of evidentiality in the broad sense are" (Chafe & Nichols, 1986:vii).

In his article, "Evidentiality in English Conversation and Academic Writing", Chafe (1986:262) further states, "I need to stress that I am using the term 'evidentiality' in its broadest sense… I will be discussing a range of epistemological considerations that are linguistically coded in spoken and written English…everything dealt with under this broad interpretation of evidentiality involves attitudes toward knowledge".

Lloyd B. Anderson (1986) attempts to create a semantically narrow definition of evidentials. According to Anderson, evidentials may be described in the following way (Anderson, 1986: 274-5):

> (3a) Evidentials show the kind of justification for a factual claim which is available to the person making that claim, whether
> direct evidence plus observation (no inference needed)

evidence plus inference
inference (evidence unspecified)
reasoned expectation from logic and other facts
and whether the evidence is auditory, or visual, etc.

(3b) Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim 'about something else'.

(3c) Evidentials have the indication of evidence as in (a) as their primary meaning, not only as a pragmatic inference.

(3d) Morphologically, evidentials are inflections, clitics, or other free syntactic elements (not compounds or derivational forms).

Later on in his article, Anderson identifies twenty distinct examples of evidential meanings that he has found among the articles published in Chafe and Nichols' 1986 volume.

2.5.1. The Role of Epistemic Markers in Grammar

Although the nature of epistemic markers is still under exploration, after examining cross-linguistic studies of epistemic forms and meanings, such as those studies found in Chafe and Nichols (1986) and in Johanson and Utas' edited volume, *Evidentials, Turkic, Iranian and Neighbouring Languages* (2000), we may observe certain tendencies in the behavior of epistemic markers. Also, we may hypothesize that some of these tendencies are universally true of epistemics. One such universal that has been proposed is that an implicational hierarchy exists, which places certain types of epistemics higher or lower on a scale of reliability or trustworthiness. Here, I explore another possible universal truth of epistemics, namely, their connection to the categories of tense and aspect.

2.5.1.1. 'Epistemic Modality' and Mood

In his article, "Some aspects of the acquisition of evidentials in Turkish", Ayhan Aksu-Koç (2000) classifies epistemic modality as a subdomain of evidentiality. Also, Aksu-Koç states

that epistemic modality involves "Attitudes towards the truth value or factuality of the content of the proposition…"(p.15). This description of epistemic modality is consistent with Thomason's (2001:271) notion of 'mood': "A verbal category that expresses the speaker's attitude toward an event or action." Therefore, although epistemic markers do not always appear marked on the verb, it may make sense to classify these markers as inherently a verbal category.

2.5.1.2. Epistemics Simultaneously Conveying Tense or Aspect

Another reason for associating epistemic markers with the verb is that, often, besides conveying such notions as the source or reliability of information, these markers simultaneously convey tense or aspect. For example, in the article mentioned above, by Ayhan Aksu-Koç, we learn that in Turkish, the epistemic markers, *–mIş, -Ir,* and *–Dir*, besides indicating whether information has been obtained directly or indirectly, also convey whether action is completed or ongoing, in other words, aspect (in Johanson & Utas, 2000:25).

In Salar, a language of Turkic origin with Northwest Chinese and Amdo Tibetan adstrata spoken primarily in Tibet, we learn that epistemic meaning is conveyed via verb suffixes, which also mark tense and aspect (Dwyer in Johanson & Utas, 2000:45). Dwyer further explains, "…indirectivity is a modal phenomenon, it intersects semantically with the realis-irrealis distinction" (in Johanson & Utas, 2000:45). Direct epistemics correspond to realis situations, in which some event or state more definitely occurs, and indirect epistemics correspond to irrealis situations, in which some event or state less definitely occurs. An example of the tie between epistemic meaning and verb forms is the use of the indicative mood for realis situations and the use of the subjunctive mood for irrealis ones.

In Sherpa, a member of the Tibeto-Burman family closely-related to Tibetan, which is spoken in the Solu-Khumbu district of Nepal in the Himalayas to the south of Mt. Everest, epistemic, tense, and aspect categories are all expressed through verb inflection (Woodbury in Chafe & Nichols, 1986:189). In Sherpa, Woodbury states, "…evidential and tense categories…combine semantically" (in Chafe & Nichols, 1986:189). Woodbury explains that depending on what tense is marked on the verb, the accompanying epistemic meaning may change.

2.5.1.3. Epistemics Derived from Verbs

Yet another reason for associating epistemic markers with the category of the verb is that often, these markers are derived from verbs. For example, in Akha, a language of the Lolo-Burmese family, sentence-final epistemic particles evolved from a variety of sources. According to Thurgood, two Akha epistemic particles descended from full verbs meaning, 'to speak, say' and 'be true'. Also, a third Akha epistemic particle originated as a modal verb, meaning, 'be able' (Thurgood in Chafe & Nichols, 1986:221-222).

2.5.1.4. Summary

Above, I have provided some evidence in support of the classification of epistemics as an inherently verbal category, as are tense and aspect. I have also demonstrated that epistemic markers, beyond conveying common notions of source or reliability of information, may also simultaneously convey tense or aspect. A further link connecting epistemic markers to verbs is that often, these markers have been found to be derived from verbs.

2.5.2. Realizations of Epistemic Functions

According to Chafe (1986:262), cross-linguistically, evidentiality may be grammatically expressed in a variety of ways, such as through the use of suffixes, auxiliaries, or adverbs. Besides differing in the way that languages grammatically express evidential or epistemic meaning, different languages happen to encode different kinds of evidentiality, referring to such notions as degrees of reliability, the source of knowledge (such as sensory evidence, language, or hypothesis), and modes of knowing (such as belief, induction, hearsay, and deduction) (Chafe, 1986:261-3).

In the sections that follow, I use Chafe & Nichols' volume (1986) as a source to examine various ways in which the English, Makah, Kashaya, Northern Iroquoian, and Japanese languages realize epistemic functions. I present sketches of these languages' epistemic systems as points of comparison with the Quechua epistemic system. Also, some of the epistemic values conveyed by these languages serve as motivation for parts of my research methodology.

2.5.2.1. English

In his article, "Evidentiality in English Conversation and Academic Writing", Wallace Chafe examines sources of epistemic meaning in both written and spoken English. According to Chafe, English expresses evidentiality through the use of modal auxiliaries, adverbs, and miscellaneous idiomatic phrases (p.261). In order to qualify reliability of knowledge in English, according to Chafe, we may use adverbs like *maybe, probably,* or *certainly*, or modals like *might* and *may* (pp.264-5).

Besides qualifying the reliability of knowledge, we may specify the mode of knowing, such as belief, inference/induction, sensory perception, through the means of language/second-

hand experience, and deduction. Chafe explains that often, the mode of knowing may carry implications as to the degree of reliability.

Knowledge acquired through the mode of belief is signaled in English with expressions such as *I think, I guess,* or *I suppose* (p.266). When the mode of knowing is inference, English speakers may use *must, obvious, seem,* and *evidently* (pp.266-7). While indicating knowledge arrived at through sensory perception, in English, we may use the verbs, *see, hear*, and *feel*, which express more reliability than do such phrases as *looks like, sounds like,* and *feels like* (p.267). In order to signal that knowledge has been obtained through the medium of language, or hearsay, English speakers may use such phrases as *people say, they say, I've been told,* and *supposed to* (p.268). Finally, examples of markers of deduction in English are *should, presumably, can, could,* and *would* (p.269).

2.5.2.2. Makah

In his article, "The Heterogeneity of Evidentials in Makah", William H. Jacobsen Jr. explains, "Makah is a language of the Nootkan branch of the Wakashan family. It is the southernmost language of the family, spoken around Cape Flattery at the north-western top of Washington State on the Olympic Peninsula" (p.9). In the Wakashan languages, which are polysynthetic, epistemic markers are "rather sharply distinguished from indicators of person and tense" (p.9). Epistemic suffixes in Makah are used to indicate that an event has been seen or experienced directly, to indicate inference from physical evidence, to indicate hearsay knowledge, to indicate knowledge based on uncertain visual evidence, and to indicate that knowledge is based on logical inference from unspecified evidence.

2.5.2.3. Kashaya

According to Robert L. Oswalt in his article, "The Evidential System of Kashaya", Kashaya, one of seven languages of the Pomo family native to northern California, has one of the "most elaborated and discriminating" evidential systems of any in the world. (p.29). In order to convey evidential or epistemic meaning in Kashaya, speakers use a verb suffix system. However, besides the verb suffix system, Oswalt notes "…Kashaya has other ways of stating evidence. There are adverbs…but this class is weakly developed. There are phrases…and there is a strongly developed class of verbs of perception" (p.43).

Using verbal suffixes, the Kashaya may indicate that they have perceived events or states directly, have performed the actions under discussion, have observed the action or state under discussion enough for them to generalize it as true, recognize the topic under discussion as common knowledge, have heard the sound of the action but did not see it, have made an inference based on circumstances or evidence found apart in space or time from the actual event or state, have experienced something in the remote past, or have acquired knowledge through hearsay. Also, a generalized evidential verbal suffix is used by Kashaya speakers while narrating, to indicate that the event under discussion occurred far in the past and that perhaps, they do not remember the precise type of evidence that was available at the time.

Interestingly, Oswalt explains, "Dreams, visions, and revelations are treated the same as ordinary waking-life happenings…"(p.42). Finally, knowledge acquired through various modern media, such as by television, movies, radio, telephone, phonograph records, tape recordings, still pictures, and writing, is reported in the following way (p.42):

1. Moving actions seen on television or in the movies: …Factual…Visual…or Personal Experience, with the choice made just as for actually witnessed events and states.
2. Speech, whether contemporaneous or recorded long earlier: …Quotative
3. Nonspeech sounds of action heard but not seen (hoofbeats, etc)…Auditory

4. Still pictures: A description of a static situation might be with …Factual or …Personal Experience, but an interpretation or inference of action from a still ('The horse is running.') would be with…Inferential I.
5. Writing, printed or handwritten: Most frequent is …Inferential I, but …Quotative is also common.

2.5.2.4. Northern Iroquoian

The Northern Iroquoian languages are spoken in regions of New York State, Quebec, and Ontario. In her article, "Evidential Diachrony in Northern Iroquoian", Marianne Mithun describes evidential affixes, predicates, and particles and states that in the Iroquoian languages, "Evidential markers qualify the reliability of information communicated in four primary ways. They specify the source of evidence on which statements are based, their degree of precision, their probability, and expectations concerning their probability" (p.89).

Mithun observes that a single evidential marker may simultaneously indicate multiple meanings concerning the reliability of information. Mithun explains, "A given marker will very often serve several of the four functions listed above, simultaneously, varying with context, or with a change in the grammatical structure of which it is a part" (p.90). For example, in Cayuga, the same evidential particle meaning, 'it seems', may be used to indicate that the information being conveyed is based on appearance, to hedge both precision and certainty, and as a marker of courtesy (pp.90-1).

2.5.2.5. Japanese

In his article "Evidentials in Japanese", Haruo Aoki explains that "Japanese evidentials are not grammaticized and belong to various word or morpheme classes: morphologically *gar* is a verb, *no, n, soo,* and *yoo* are nouns, and *rasi* is an adjective" (p.223). These evidential forms cover three main areas of Japanese evidentiality: "…reporting sensations experienced by

someone other than the speaker, reporting as a fact something which is ordinarily not directly knowable, and showing that some piece of knowledge was arrived at by hearsay or inference" (Chafe, p.x-xi). Finally, Aoki mentions the use of evidentials in signaling politeness.

2.6. Discourse Analysis

According to Deborah Schiffrin, "…discourse analysis is one of the most vast, but also least-defined areas in linguistics" (1994:42). Discourse analysis has been conceived of both as its own field of inquiry as well as a methodology. Schiffrin (1994:42) finds differing definitions of discourse analysis (DA) to be partially responsible for its tremendous scope. Two widespread definitions of DA are "language above the sentence" and "language use" (Schiffrin, 1994). Also, Johnstone (2000:80, 125-6) draws a distinction between "discourse", "the study of language use" and "discourses", "the ways of thinking and talking that circulate in our social environment".

In her work, *Approaches to Discourse,* Deborah Schiffrin presents six different approaches to DA: The Ethnography of Communication, Speech Act Theory, Interactional Sociolinguistics, Gricean Pragmatics, Conversation Analysis, and Variation Analysis (1994). These approaches vary in the extent to which they focus on 'language above the sentence,' corresponding to more formal, structural issues, and 'language use,' corresponding to more functional issues. Johnstone takes both the formal and functional sides of DA into account when she states that DA involves "…examining aspects of the form and function of real samples of language use" (Johnstone, 2000:80, 103).

Schiffrin sums up the different focal points of formal and functional approaches to DA when she states:

> If we focus on structure, our task is to identify and analyze constituents, determine procedures for assigning to utterances a constituent status, discover regularities underlying combinations of constituents (perhaps even formulating rules for producing those regularities), and make principled decisions about whether or not particular arrangements are well formed. If we focus on function, on the other hand, our task is to identify and analyze actions performed by people for certain purposes, interpret social, cultural, and personal meanings, and justify our interpretations of those meanings for the participants involved (1994:42).

Formal approaches to DA focus on 'syntactic' or 'sequential' goals and attempt to answer the question of whether there are "principles underlying the order in which one utterance, or one type of utterance follows another" (Schiffrin, 1994:41). Functional approaches to DA, on the other hand, have 'semantic' and 'pragmatic' goals and attempt to answer the question of how the "organization of discourse and the meaning and use of particular expressions and constructions within certain contexts…allow people to convey and interpret the communicative content of what is said" (Schiffrin, 1994:41). Furthermore, functionalist approaches to DA involve analyzing spoken or written discourse systematically in order to investigate the question of why the speaker (or writer) expresses him/herself in the way that he/she does.

2.6.1. Functional Approaches to Discourse Analysis

As will be explained in further detail below, for the purposes of the present study, I choose to employ a functional approach to DA. In my application of DA, I will draw chiefly from the ethnography of communication. However, in my analysis, I will also incorporate concepts from speech act theory and interactional sociolinguistics. With this in mind, in the immediately following sections I present some discussion of these functional approaches to DA.

Schiffrin (1994:32) states, "A definition of discourse as language use is consistent with functionalism in general: discourse is viewed as a system (a socially and culturally-organized way of speaking) through which particular functions are realized." Functionalist discourse analysts focus on "…the way patterns of talk are put to use for certain purposes in particular

contexts and/or how they result from the application of communicative strategies" (1994:32). Therefore, consistent with functionalism, the way that utterances are situated in contexts takes on great importance.

2.6.1.1. The Ethnography of Communication

Dell Hymes is credited with the creation and development of the ethnography of communication, which, according to Schiffrin (1994:142 & 47), "falls squarely within the functionalist paradigm…" and "focuses on language and communication as cultural behavior". Within this approach, language is thought of as simultaneously being constrained by culture and revealing and sustaining culture. Both traditional, anthropological ethnography as well as the ethnography of communication may be carried out through the method of participant observation. While the goal of the anthropologist is to "learn what native members already know about how to 'make sense' out of experience", the goal of the ethnographer of communication is to gain an understanding of the native members' communicative competence, their "knowledge of grammar and knowledge governing appropriate use of grammar" (Schiffrin, 1994:140).

Dell Hymes' heuristic, 'SPEAKING', serves as a helpful guide to ethnographers of communication attempting to identify potentially important aspects of speech situations. Each letter of the word, 'SPEAKING', refers to a potentially important aspect of communicative events: Setting/Scene (physical circumstances and the subjective definition of an occasion), Participants (speaker and audience), Ends (purposes and goals, outcomes), Act sequence (message form and content), Key (tone, manner), Instrumentalities (channel, form of speech style), Norms (norms of interaction and interpretation), and Genre (textual categories) (1972, cited in Schiffrin, 1994:137).

According to Schiffrin, the ethnography of communication is "the most encompassing" and "the most integrative approach" of all DA approaches considered in her work, focusing on "a wider range of communicative behaviors than the other approaches" (1994:137 & 143). In fact, she states that an ethnographic approach to discourse "can combine speech act and interactional approaches within a larger framework of inquiry" (1994:143). In other words, the ethnography of communication may be compatible with speech act theory and interactional sociolinguistics.

Moreover, Schiffrin claims that while the largest communicative unit considered by ethnographers of communication is the 'speech situation' and the second largest is the 'speech event', the smallest is the 'speech act'. Schiffrin states, "The smallest unit is the speech act: although Hymes (1972b) does not explicitly define this, his examples include acts that can be defined through their illocutionary force (e.g. commands, greetings), as well as those that cannot be so defined (e.g. jokes)" (1994:142).

2.6.1.2. Speech Act Theory

Speech act theory is a functional approach to DA that "focuses on communicative acts performed through speech" (Schiffrin, 1994:47). In his book *Pragmatics*, Stephen C. Levinson divides discourse analysts into two major categories, text grammarians and speech act theorists (1997:288). The first main proponents of speech act theory were the British philosopher John L. Austin and his student, John R. Searle (Mey, 1996:109-110). In speech act theory, language is thought of as action. In his book, *Pragmatics, An Introduction,* Jacob L. Mey states, "The first thing one should notice is that speech acts are actions happening in the world, that is, they bring about a change in the existing state of affairs…" (1996:111-12).

Here, it is helpful to consider the different aspects, or forces, of speech acts, a topic first described by Austin. All utterances are speech acts comprised of a locutionary aspect, illocutionary aspect, and perlocutionary aspect. Mey (1996:112-13) cites Levinson's (1983:236) description of speech act forces and describes 'locutionary aspect' as having to do with "…the utterance of a sentence with determinate sense and reference". 'Illocutionary aspect' is "…the naming of a statement, offer, promise, etc. in uttering a sentence, by virtue of the conventional *force* associated with it". Finally, 'perlocutionary aspect' refers to "…the bringing about of effects on the audience by means of uttering the sentence, such effects being special to the circumstances of the utterance". For example, if I were to say to a friend, "I'm hungry", the locutionary aspect of this speech act is that I am expressing a desire to eat. The illocutionary aspect of this speech act is declarative. A possible perlocutionary aspect of this speech act might be that I get my friend to offer to take me out to lunch.

Two important notions put forth by speech act theorists are that "an utterance can perform more than one speech act at a time" (Schiffrin, 1994:49) and that felicity conditions must hold for the successful application of speech acts. Felicity conditions are those conditions "…that are necessary and sufficient for the utterance of a given sentence to be a successful, non-defective performance of a given act" (Schiffrin, 1994:55). Knowledge of the felicity conditions, or appropriate circumstances, for performing speech acts is a part of our communicative competence. Schiffrin (1994:55) explains, "…language can be used for speech acts because people share rules that create the acts that say what is meant."

2.6.1.3. Interactional Sociolinguistics

Interactional sociolinguistics, like speech act theory, is a functional approach to discourse analysis that may be integrated well with the ethnography of communication. The goal of interactional sociolinguistics is to focus on the social and linguistic meanings created during interaction (Schiffrin, 1994:47). The work of two scholars, John Gumperz, a linguistic anthropologist, and Erving Goffman, a sociologist, best represents this DA approach. Both Gumperz and Goffman examine the interaction among the self, the other, and context in conversation and view language as "…one of a number of symbolic resources that provide an index to the social identities and relationships being continually constructed during interaction" (Schiffrin, 1994:105-6).

An important concept developed by Gumperz is that of 'contextualization cues', "…aspects of language and behavior (verbal and nonverbal signs) that relate what is said to the contextual knowledge…" (Schiffrin, 1994:99). Such cues may be either linguistic, involving choice among lexical, phonetic, and syntactic options, or extralinguistic, involving such things as intonation and speech rhythm. Depending on the contextualization cues that one produces, linguistic strings with basically identical content may come to have a variety of different meanings and interpretations.

As is a knowledge of felicity conditions in speech act theory, an understanding of speakers' contextualization cues is a part of communicative competence. Gumperz explains that contextualization cues allow conversationalists to "rely on indirect inferences which build on background assumptions about context, interactive goals and interpersonal relations to derive frames in terms of which they can interpret what is going on" (1982a:2, cited in Schiffrin, 1994:101). Schiffrin (1994:101) observes, "…Gumperz (1982a:209) reformulates Hymes's

(1974) concept of communicative competence in interactional terms, to include 'the knowledge of linguistic and related communicative conventions that speakers must have to create and sustain conversational cooperation'..."

An important contribution made by Erving Goffman is the notion of 'the self' as a public, interactive, social construction. One way to manage one's presentation of self is through the maintenance of 'face concerns'. "The maintenance of both self and face is built into the fabric of social interaction…" (Schiffrin, 1994:102).

Two other important concepts developed by Goffman are 'frame' and 'footing': "Frames are the organizational and interactional principles by which situations are defined and sustained as experiences" and "footing concerns 'the alignments we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance'" (Goffman 1974; 1981c:128, cited in Schiffrin, 1994:104).

Finally, Goffman's 'participation framework' locates the self with regard to "a set of positions that individuals within perceptual range of an utterance may take in relation to that utterance…" (1974; 1979, in Schiffrin, 1994:104). Four such positions, or participation statuses, are as 'animator' (one who produces talk), 'author' (one who creates talk), 'figure' (one who is portrayed through talk), and 'principal' (one who is responsible for talk) (Schiffrin, 1994:104). In conversational interaction, one's choice of participation status reflects a relation to one's utterance as well as a relation to the other interlocutors.

3. This Study

3.1. Research Questions

In the Introduction, I presented brief outlines of my three research goals for this dissertation. Here, I elaborate on my three research questions:

1. What is the nature of the meaning (semantics) and use (pragmatics) of the Cuzco Quechua epistemic system, including the epistemic suffixes, *-mi/-n* and *-si/-s*, and the Quechua verb past tenses, *-rqa-* and *-sqa-*? Is the use of this epistemic system affected by the **SPEAK** discourse factors that I describe below: **S**ource of information, **P**articipation of the speaker, **E**ffects on speaker and hearer, **A**ttitude toward truth-value, and the **K**inds of interlocutors involved?

2. Do my study participants show evidence of cross-linguistic influence from Quechua to Spanish? If so, how?

3. Do the demographic characteristics (i.e. gender, age of L2 acquisition, etc.), social network characteristics, and the language attitudes (i.e. more positive or less positive toward Quechua and Spanish) of my study participants correlate with their production in Spanish of phonological, morphosyntactic, and calque cross-linguistic features such as those discussed above in the literature review?

3.2. Theoretical Motivation

3.2.1. Theoretical Motivation for Research Goal 1

Three theoretical motivations lead me to choose my first research goal: (1) disagreement in the literature as to the semantics of the Quechua epistemics, which I will summarize below, (2) the existence of cross-linguistic studies that have uncovered a variety of uses for epistemic markers in discourse, and (3) a lack of attention in the literature to the use of the Quechua epistemics in discourse.

After presenting these three theoretical motivations, I present five broad discourse factors that I hypothesize may be influential in determining how speakers choose to employ the Cuzco

Quechua epistemic system in discourse. I use the word, 'SPEAK', as an acronym for my five discourse factors.

3.2.1.1. Disagreement: the Semantics of Quechua Epistemics

There is disagreement in the literature as to the semantics of the Cuzco Quechua epistemic system. Klee and Ocampo (in Silva-Corvalán, 1995), Lipski (1996), and Escobar (1997) claim that the Quechua *-mi/-n* and *-si/-s* signal a first-hand versus second-hand information source distinction. David Weber (1986) raises the question of whether the Huanuco Quechua epistemic suffixes, *-mi*, *-shi*, and *-chi*, which are the Huanuco Quechua equivalents of the Cuzco Quechua *-mi/-n*, *-si/-s*, and *-chá*, should be thought of as primarily expressing distinctions regarding information source (e.g. first-hand vs. second-hand information source) or distinctions regarding attitudes toward the information being expressed (e.g. truth-value, level of certainty, involvement, responsibility). Janis Nuckolls (1993) claims that the primary and general meaning of *-mi/-n* across all dialects of Quechua is to signal a high level of certainty regarding the truth of the information. Nuckolls (1993) goes on to state that a secondary or applied meaning of *-mi/-n* is to signal that the information was witnessed first-hand by the speaker.

In her dissertation, "Semantics and Pragmatics of Evidentials in Cuzco Quechua", Martina Faller (2002) carries out a formal semantic analysis of the Cuzco Quechua Epistemic system. In contrast to Nuckolls' (1993) claim, Faller (2002:168) claims that *-mi/-n* does not encode a high degree of certainty but "Rather, the high degree of certainty associated with assertions containing *–mi* is a property of assertions in general, including those that contain no evidential." Faller (2002:168) goes on to suggest that *-mi/-n*,

> …encodes that the speaker has the best possible or strongest evidence in relation to the type of information conveyed…For personal information, speakers are expected to have direct access to the described events in order to use *–mi*. For encyclopedic information, speakers are only expected to have obtained the information from a source of authority.

In her analysis of *-si/-s*, Faller (2002:204) claims that speakers who use *-si/-s* indicate that some other speaker made the original speech act to which they are referring. She states, "The Reportative simply indicates that the speaker obtained his or her information from a third person" (2002:262).

3.2.1.2. Epistemic Markers in Discourse: a Cross-Linguistic Perspective

People use epistemic markers when they speak because they are aware that truth is relative. As Chafe and Nichols (1986:vii) put it, "There are some things people are sure of, either because they have reliable evidence for them, or –probably more often- because they have unquestioning faith that they are true. There are other things people are less sure of, and some things they think are only within the realm of possibility." When we use epistemics, we qualify the truth of the information we pass on, thereby expressing an attitude or disposition toward that information.

A number of cross-linguistic studies have uncovered a variety of uses for epistemic markers in discourse. For example, in Northern Iroquoian and Japanese, discussed above, Marianne Mithun and Haruo Aoki mention the use of epistemics in signaling politeness. Also, Mithun mentions the ability of a Cayuga epistemic particle to hedge precision and certainty (1986:90-1). Adrienne Dwyer (2000) examines direct and indirect experience in Salar, a Turkic language. Dwyer's study also finds the relation of epistemic markers to politeness.

For Salar, Dwyer makes a distinction between direct sources of information, such as in the phrases 'I see/hear/taste/smell/feel/do', and indirect sources of information, such as in 'I hear

it reported/ I infer/ I discover; it happened' (p.45). Dwyer explains that in Salar, a language in which epistemology is marked on verb suffixes that also happen to mark tense and aspect, the choice of epistemic forms is "…affected by discourse-pragmatic factors (degree of politeness, register/genre, foregrounding, and intentionality)" (p.45). For example, Dwyer explains, "If the hearer challenges evidence presented, or if the speaker anticipates such a response, speakers may choose indirect/less-certain means of coding this information even though the evidence is direct/more-certain" (p.45).

Furthermore, Dwyer has found that in Salar, "The frequency of direct forms may be correlated with gender. Female speakers of Salar tend to use more indirect forms…"(p.57). Dwyer concludes, therefore, that direct and indirect epistemic marking is both a syntactic and a pragmatic constraint and explains, "The relationship between the speaker, the topic, and other participants thus mediates the choice of indirectivity marking" (p.57).

In his article "Self-Evidence and Ritual Speech", John W. Du Bois (1986:322) draws a distinction between providing evidence for a statement, such as visual or inferential evidence, and providing authority for it, where "…providing evidence is simply a special case of providing authority". Furthermore, Du Bois states, "…no utterance is accepted without authority".

Du Bois finds the perlocutionary effect of providing evidence to be one of persuasion, involving changing the state of mind of the hearer (1986:323). Depending on what the evidence and authority are for a certain piece of information, we may place that information on a personal scale of reliability and then choose a course of action based on the placement of that information on our scale. Therefore, knowing someone else's attitude toward some certain piece of information may color my attitude toward that same information as well as my attitude toward the source of that information.

For example, let us imagine that after being inside at home in my bedroom all morning, I decide that I'd like to go out for a walk. I want to dress appropriately for the weather and so I ask my sister whether it is cold outside. If my sister were to tell me that she had just been outside and that it's very cold out, I'd be much more likely to put on a warmer jacket then if she were to tell me that she had also been inside at home all morning but had heard from a friend of hers the previous day that the weather was supposed to get colder. From this example, we may draw a conclusion about the impact of evidential/epistemic markers on the hearer. Firstly, direct experience (my sister having been outside and having directly witnessed the state of the weather) is usually more reliable than indirect experience (my sister having heard from her friend the previous day that the weather was supposed to get colder).

In Hill and Irvine's edited volume (1993), *Responsibility and evidence in oral discourse,* we find further examples of the ways in which grammaticalized epistemic categories may be manipulated in oral interaction. In the introduction (1993:17), they state, "Evidential elements obviously function in the manipulation of responsibility for knowledge." According to Hill and Irvine (1993:3), "…discussions of the allocation of responsibility, the marshaling of evidence, and the rhetoric of claims and persuasion bear directly…on the analysis of language and discourse." Hill and Irvine recognize the ethnography of the use of epistemic systems as an important emphasis for future study.

Hill and Irvine envision socially-situated conversational participants as agents who may use epistemics in the process of socially-constructing meaning and knowledge. These interlocutors may use epistemics in order to claim, diffuse, or evade responsibility for an utterance. In addition, one's management of epistemics may reveal the nature of one's social

identity. Moreover, in society, the distribution of responsibility "…may be a key site for the production and reproduction of rank and 'significance'…" (1993:22).

Many of the papers presented in Hill and Irvine's volume address the use of reported speech. Invoking additional sources for an utterance, thereby creating "double-voiced" utterances (a term borrowed by Hill and Irvine from Bakhtin, 1993:6), may allow speakers to create greater authority for their utterances. Another use of reported speech may be to distance oneself "…from an utterance deemed somehow reprehensible" (1993:7).

In his article, "The Grammaticalization of Responsibility and Evidence: Interactional Potential of Evidential Categories in Newari" (in Hill & Irvine, 1993), Edward H. Bendix examines the use of the Newari epistemic system in discourse. Bendix finds that depending on the epistemic marker used in discourse, a speaker may take responsibility for his/her action, exclude his/her involvement with the content of the utterance, and express personal intent or control in performing the action referred to. Also, Bendix ranks the elements of the Newari epistemic system in terms of their requirements for strength of evidence. For example, Bendix finds that the epistemic marker expressing hearsay carries weaker necessary epistemic conditions. Finally, Bendix states that the ethnography of the use of epistemics is a "…fertile corner of research within the larger study of responsibility and evidence in strategic interaction" (in Hill & Irvine, 1993:243).

3.2.1.3. Cuzco Quechua Epistemics in Discourse

Literature on the Quechua epistemic system to date has neglected to present a discourse focus. In the preceding section, I present works of authors who have found discourse uses for epistemic markers across a variety of languages and language families. Some of these uses

mentioned above include indexing gender, indicating politeness, persuading, hedging certainty, and taking, evading, and diffusing responsibility. The findings of these researchers suggest that the Quechua epistemic markers might also be used in a variety of ways and for a variety of purposes in Quechua discourse.

3.2.1.4. 'SPEAK' Discourse Factors

Based on (1) the findings of cross-linguistic studies that have uncovered a variety of uses for epistemic markers in discourse, (2) claims that have been made regarding the semantics of the Quechua epistemic system, and (3) discourse factors that are proposed as influential by functional approaches to discourse analysis, such as the ethnography of communication, speech act theory, and interactional sociolinguistics, I have identified five broad discourse factors that I hypothesize could be influential in determining a speaker's choice of epistemic marker in Quechua. In order to facilitate memorization and following Dell Hymes' example of using an acronym to represent points of investigation into discourse, I choose to represent my five broad discourse factors with the acronym, 'SPEAK'. Below, I outline these five discourse factors and the sub-factors that fall under each of these five.

1.) (S) Source of information: How was the information under discussion gathered by the speaker(s)?

a. Sensory evidence (whether information is gathered through seeing, hearing, feeling, smelling, tasting)

b. In action/motion (whether one witnesses action in motion or as in a photograph)

c. Printed matter (whether information is gathered from reading newspapers, books)

d. Alternate states of consciousness (whether information is gathered while the speaker is asleep, drunk)

e. Evidence (whether one observes the effects of some event under discussion)

f. Modern media (whether information is transmitted through television, radio, telephone)

g. Trustworthy messengers (whether one receives information from a trusted person, such as a family member or close friend)

h. Witness/Nonwitness (whether the information was gathered through first-hand or second-hand experience)

2.) (P) Participation: What was the nature of the speaker's involvement in the action/event under discussion?

a. Agency (whether one performed some action being discussed)

b. Intent (whether one intended to perform some action being discussed)

c. Participant (whether one directly participated in an event or merely observed from afar)

3.) (E) Effect on speaker(s) and hearer(s): How will the transmission of information about the event under discussion potentially affect the speaker(s) and the hearer(s)?

a. Speaker's personal interest (whether the speaker has something to gain or lose from transmitting information in a particular way)

b. Message content (whether the information is good or bad news)

c. Potential impact on the hearer (the influence that transmission of the message may have on the hearer)

4.) (A) Attitude toward the truth value: What is the speaker's attitude toward the truth of the information he/she is transmitting?

a. Truth value (whether the information is true or false)

b. Collective/widespread knowledge (whether the information communicated is considered to be common knowledge among the members of some speech community)

c. Probability (whether something is likely)

d. Certainty (how certain or doubtful someone is regarding the truth of the information being communicated)

5.) (K) Kind of interlocutors involved: What are the characteristics of those involved in talking about the event?

a. Age (how old the speaker(s) is/are)

b. Gender (whether the speaker(s) is/are male or female)

c. Relationship (what the relationship is of the interlocutors to each other)

3.2.2. Theoretical Motivation for Research Goal 2

As mentioned above, my second research goal is to investigate evidence of cross-linguistic influence of Cuzco Quechua on the variety of Spanish spoken by my study participants. In order to achieve this research goal, I investigate all types of cross-linguistic influence as well as the specific case of the cross-linguistic influence of the Cuzco Quechua epistemic system. Two theoretical motivations lead me to choose this second goal: (1) disagreement in the child second language acquisition literature regarding the role of the native language and access to Universal Grammar and (2) disagreement in the literature regarding the way in which the Cuzco Quechua epistemic system exerts cross-linguistic influence on Andean Spanish.

As described above, in the SLA literature, there is debate as to whether children acquiring a second language within the critical period experience cross-linguistic influence from their first language. Since the majority of my study participants are native-Quechua speaking children or adolescents who began to acquire their second language, Spanish, during childhood, finding evidence of cross-linguistic influence in my study participants' speech will inform this SLA debate.

The disagreement regarding the way in which the Quechua epistemic system may exert cross-linguistic influence on Andean Spanish has been presented above. I take the field a step closer to resolving the disagreement on this issue with the results of my study.

3.2.3. Theoretical Motivation for Research Goal 3

Sociolinguistic findings regarding the importance of demographic characteristics (i.e. gender, age of L2 acquisition, etc.), social network characteristics, and the importance of language attitudes on speech production lead me to my third research goal. I investigate whether the demographic characteristics, social network characteristics, and language attitudes of my study participants correlate with their production in Spanish of phonological, morphosyntactic, and calque cross-linguistic features such as those discussed above in the literature review.

3.3. Methodology

3.3.1. Key Informant

Consultation with my key informant, Georgina Maldonado Gómez, has influenced both my theoretical motivation for this study as well as its methodology. Gómez, a native Quechua speaker from Chumbivilcas, located in the countryside outside of the city of Cuzco, is bilingual in Spanish and teaches Quechua language courses at the Centro de Estudios Regionales Andinos, 'Bartolomé de Las Casas' (CBC) graduate institute in Cuzco, Peru. She has also taught basic, intermediate, and advanced Quechua language courses at the University of Michigan during the 2001 to 2002 academic year.

In 2001, Gómez introduced me to both of the speech communities in which I have carried out my research. She is a *socia*, or member and donor, of one of the speech communities I examine here and a neighbor of the other.

During my three field seasons, in order to ensure that my interview instruments be completely understandable to my study participants, I asked Gómez to advise me on how to write the Spanish of my interview questions. I also asked her to assist me in the creation of my Quechua elicitation questions, ensuring that they be as appropriate as possible. I analyze data obtained from Gómez separately from my larger data sample as a point of comparison.

3.3.2. Participants

3.3.2.1. CdC and CAITH

During field seasons in 2001, 2002, and 2003, I carried out research among bilingual Quechua-Spanish speakers living in the city of Cuzco, Peru. I gathered these data among two speech communities, the *Asociación Civil, 'Gregorio Condori Mamani' Proyecto Casa del Cargador*, 'Gregorio Condori Mamani Civil Association, House of the Carrier Project', and CAITH, *El Centro de Apoyo Integral a la Trabajadora del Hogar*, 'Center for the Integral Support of the Female Home Worker'. The participants of my study found temporary refuge at both the *Casa del Cargador* and the *Centro Integral a la Trabajadora del Hogar*, agencies created with migrants like them in mind. Throughout the course of this study, I will refer to these two speech communities as 'CdC' and 'CAITH' respectively.

Both the CdC and CAITH are non-profit governmental agencies. The CdC is a temporary home to primarily adolescent males, the majority of whom earn a living as *cargadores*, 'carriers', by transporting agricultural goods within the large market places of Cuzco. This is a terribly strenuous occupation, as cargadores must carry immensely heavy loads on their backs, sometimes reaching weights of over 100 kg or 250 lbs. As many of the cargadores are young, this weight may more than double that of their body weight. These large

bundles of food, such as potatoes, carrots, tomatoes, or onions, are balanced on the backs of the cargadores with rope. The objective of the CdC, as published in the *Manual de Organización y Funciones* by the Public Registry of Cuzco (1996), is to improve the quality of life of the peasant migrant carriers, thereby allowing them to attain respectable levels of health, education, and family well-being. The main goal of CAITH, as published in *¿Estás Bien? CAITH: La cultura del afecto con trabajadoras del hogar*, by Maite Rofes (2002), is to offer educational support and assistance to female adolescent domestic servants, who come from rural areas outside of the city of Cuzco. CAITH also functions as a temporary home for these female domestic servants.

3.3.2.2. Migration

The inhabitants of both of these agencies and the participants of my study, mostly young native Quechua speakers, migrated to the city of Cuzco from mostly surrounding rural Quechua-dominant areas within the Department of Cuzco in order to make a living and obtain a higher quality education than what would be available to them in their rural communities of origin. Subsistence farming is generally the dominant occupation within all of my study participants' rural communities of origin and most of my participants spent the early parts of their childhoods on farms, where they helped to work the fields and herd the sheep, llamas, and alpacas.

Some of my participants migrate to the city of Cuzco seasonally, earning money in Cuzco that is later brought home to their families. In this way, they maintain ties to their home communities. Also, some of my participants choose to live in Cuzco only while school is in session, traveling home after the school year has been completed. Still others among my participants have migrated to Cuzco with the intention of staying. Often, these participants have lost their ties with their home communities.

Most of these participants began to acquire their second language, Spanish, during childhood and adolescence. Most of my participants began elementary school within their communities of origin before migrating to the city of Cuzco. Some of these received their schooling in Quechua, others had bilingual Quechua-Spanish elementary schooling, while still others received their elementary schooling through the means of Spanish. Therefore, some of these participants began their acquisition of Spanish while still living within their rural communities of origin while others began their L2 acquisition upon their arrival to Cuzco. Although Cuzco was once the heart of the Incan Empire, as an international city largely supported by the revenue from tourists, the Cuzco of today is Spanish-dominant.

My study participants' communities of origin vary in terms of their Quechua-dominance and the extent to which they have been touched and influenced by Spanish-speaking Peruvian culture. The rural communities most-influenced by Spanish-speaking culture maintain higher levels of Quechua-Spanish bilingualism and lower levels of Quechua dominance. Furthermore, members of these Spanish-influenced rural communities live at relatively lower altitudes, have electricity, regularly use money to buy and sell goods, and are exposed to popular media, such as television, the radio, and magazines.

The rural communities least-influenced by the Spanish-speaking Peruvian culture maintain lesser levels of Quechua-Spanish bilingualism and higher levels of Quechua dominance. Furthermore, members of these lesser-influenced rural communities live at relatively higher altitudes, may not have electricity, may not be exposed to much popular media, and may regularly trade goods rather than use money to buy and sell. Therefore, migrating to the city of Cuzco was more or less a language and culture shock for my study participants who came from such communities.

3.3.2.3. Arrival at Cuzco

Although the extent of the Spanish language and culture influence varies throughout the rural communities of the Department of Cuzco, almost all of my study participants arrived in Cuzco with a Quechua identity. That is, they felt themselves to be Quechua speakers, descendants of the citizens of the Incan Empire, and heirs of an Andean cultural tradition. The majority of their families and friends spoke Quechua. These participants dressed in the traditional Andean fashion, with males and females often wearing ojotas (sandals made from the same rubber as that of car tires), males often wearing ponchos (a woven wool covering worn over the shoulders and often extending down to the hips) and ch'ullos (a woven wool hat with ear flaps), and females often wearing skirts in layers and their hair in long braids.

Upon their arrival in Cuzco, beyond having to cope with varying levels of language and culture shock, my participants met with intense discrimination on the part of non-Quechua speakers as well as on the part of those Quechua speakers who had lost or suppressed their Quechua identities and who had shifted completely to Spanish monolingualism. In desperate poverty but with an ambition for a 'better' life, my study participants found work where they could. As Peru suffers from high unemployment and extreme levels of poverty, the majority of my male study participants had to settle for work as cargadores while the majority of my female study participants had to settle for work as domestic servants.

3.3.2.4. Temporary Refuges

As mentioned above, some of my study participants migrate only seasonally to the city of Cuzco while others have migrated permanently. For those seasonal migrants, the Casa del Cargador and CAITH are temporary refuges. However, as the general mission of both of these

agencies is to serve as a safe haven for those Quechua-speaking migrants in desperate need, the staff members of both agencies assist and encourage their inhabitants to become independent and self-sufficient as soon as possible after their arrival. At the Casa del Cargador, inhabitants are encouraged to achieve success in education, including elementary school, high school, university, and vocational school. The staff of the CdC attempts to assist their inhabitants in finding occupations other than as *cargadores*. At CAITH, inhabitants are also encouraged to succeed in their schooling and to strive in the short term to become effective domestic servants and in the long term to become professionals with stable careers. After having lived at CAITH for one year, inhabitants are strongly encouraged to become independent and move out, thereby creating space for newcomers in more desperate need. Both the CdC and CAITH are filled to capacity with inhabitants who sleep in rows of bunk beds.

After having moved out and become independent, former CdC and CAITH inhabitants still living in Cuzco often return to these two agencies regularly to visit and maintain social ties with the staff and current inhabitants of the two agencies.

3.3.2.5. Participant Constancy

I carried out research during three separate field seasons, during the summers of 2001, 2002, and 2003. As the CdC and CAITH serve as temporary rather than permanent homes for my study participants, it was not possible to find and work with all of the same participants year after year. In total, over the three field seasons, I carried out interviews with 169 different inhabitants of the CdC (109 participants) and CAITH (60 participants). In Table 1 below, I include the numbers of participants of each of the two populations interviewed by me during each of the three field seasons:

Table 1. Participant totals for year and affiliation

	2001	2002	2003
CAITH	20	31	36
CdC	56	31	47

I did interview some of the same participants during multiple field seasons. In Table 2 below, I present the numbers of participants of the CdC and CAITH populations interviewed by me during multiple field seasons:

Table 2. Participant totals for multiple years and affiliation

	2001 and 2002 only	2001 and 2003 only	2002 and 2003 only	2001, 2002 and 2003
CAITH	1	9	15	7
CdC	5	11	9	7

3.3.3. Setting

I interviewed each of the CdC residents inside of the CdC, either in the common recreation/lunchroom/meeting room, outside in the courtyard, or in the library. Each of these areas is public and open to all residents and staff of the CdC. My being in public locations in the CdC was conducive to my meeting new study participants. The fact that my participants and I would remain in public view at all times lessened my participants' anxiety. Also, having seen me carry out interviews with their fellow housemates, by sitting and watching close by or from a distance, also helped in lessening any anxiety on the part of my participants about interacting with me and being recorded by me. In a similar fashion, I interviewed residents of CAITH inside of CAITH, either outside in the courtyard, in the communal study room, or in other shared areas of the property.

3.3.4. Demographic Interview

I conducted demographic interviews with all study participants. By carrying out these demographic interviews, I learned such things as my participants' names, ages, hometowns, time spent living in their hometowns, what their first language was, how old they were when they started to speak their second language, if they had attended school and, if so, where and for how many years, and whether they had received their schooling in Quechua or in Spanish. Furthermore, I asked them such questions as how old they were when they arrived in Cuzco for the first time, how long they had lived in Cuzco, and how long they had lived in the CdC or in CAITH. My Demographic Interview questions may be found in the appendix.

3.3.5. Elicitation of Short Narratives

During my 2001 field season, I used an interview design aimed at eliciting short narrative examples in Spanish, mostly in the past tense, of information for which I expected my participants to have either first-hand or second-hand knowledge. For example, I expected my participants to have answers containing first-hand knowledge for such questions as "How did you come to learn of the CdC?", "What did you used to do when you were a little boy?", "What did you do this morning?", and "What did you do yesterday?". I expected my participants to have answers containing second-hand knowledge for such questions as "How did your best friend here come to learn of the CdC?", "What did your parents used to do when they were little?", "What did Vladimiro Montesinos do?", "What happened in Arequipa?", and "What did the Incan Emperors do?". The reader may find my full elicitation device in the appendix.

3.3.6. Role Play Investigation

During my 2002 field season, I used an approach similar to that used by Shoshana Blum-Kulka, Juliane House, and Gabriele Kasper in their 'Cross-Cultural Speech Act Realization Project' (CCSARP) (1989:11). Blum-Kulka, House, and Kasper set up the CCSARP in order to investigate "…cross-cultural and intralingual variation in two speech acts: requests and apologies" (1989:11). They explain that for the CCSARP, rather than attempting to gather "authentic" data, "recorded by participant observers during natural interactions", they were interested in "…getting a large sample, in seven countries, of two specific speech acts used in the same contexts" (1989:13). Furthermore, they "…wished to compare speech acts not only cross-culturally but also within the same language, as produced by native and nonnative speakers" (1989:13). These authors explain, "These demands for comparability have ruled out the use of ethnographic methods" (1989:13).

As their elicitation instrument, Blum-Kulka, House, and Kasper used a discourse-completion test (DCT). The DCT:

> …consists of scripted dialogues that represent socially differentiated situations. Each dialogue is preceded by a short description of the situation, specifying the setting, and the social distance between the participants and their status relative to each other, followed by an incomplete dialogue. Respondents were asked to complete the dialogue, thereby providing the speech act aimed at (1989:13-14).

Like Blum-Kulka, House, and Kasper, in the design of my Role Play instrument, I felt that the need for comparability among my participants and my desire to test my hypotheses on a relatively large number of participants ruled out the sole use of ethnographic methods. In this study, rather than relying solely on ethnographic methods for data collection, I combine ethnographic methods and interview elicitation techniques. In 2002, similar to the DCT, I engaged my participants in a role-play activity, in which I asked them to tell me how they would respond if they were involved in a variety of different specific situations. Like Blum-Kulka,

House, and Kasper, I first provided my participants with a short description of a situation, specifying the relationships among the characters in each situation.

I used edited clip art drawings in order to assist my description of each situation presented to my participants. My rationale for presenting my participants with clip art drawings corresponding to the situations I asked them to respond to is similar to the rationale discussed in Chafe's (1980) *The Pear Stories, Cognitive, Cultural, and Linguistic Aspects of Narrative Production*. In Chafe's volume, we find a number of articles describing how members of different speech communities from all over the world responded linguistically to a controlled visual stimulus, "The Pear Film" (1980:xiii). Chafe explains, "We believed it would be useful to collect examples of different people talking about the same thing…in order to see what similarities and differences emerged between different verbalizations of what was, at least to a large extent, the same knowledge" (1980:xii). Chafe further explains, "It was impossible to imagine how to present the same 'real' experience to different people in different places at different times" (1980:xii). In lieu of presenting the same 'real' experience to study participants, Chafe decided that using a film would be a useful compromise.

Therefore, in my study, rather than using film as a controlled visual stimulus, I use drawings. I used the drawings, together with my description of each situation, in order to impart 'the same knowledge' to my participants. Because I am investigating the use of epistemic markers in a variety of contexts, in order to compare my participants' responses, I thought it necessary to create such controlled stimuli.

While carrying out my Role Play Interview, I asked my study participants to respond to nine separate situations. I used two similar sets of nine situations, one for the CdC and the other for CAITH. The main difference in these two sets of situations is that I made the protagonist

male for the CdC and female for CAITH. In writing these interview situations, I created different contexts that I hypothesized might be important in determining the semantics and pragmatics of the Cuzco Quechua epistemic system. The situational contexts I created for the Role Play Interview both isolate and combine aspects of the five discourse factors that I refer to above with the acronym, 'SPEAK'. I have included my Role Play interview questions and accompanying clip art drawings in the appendix.

3.3.7. Subjective Reaction Test

During my 2003 field season, I employed a type of Subjective Reaction Test with my study participants in order to investigate both the semantics and pragmatics of the Cuzco Quechua epistemic system. I designed this instrument in order to test whether the SPEAK discourse factors I describe above influence my participants' use of the Cuzco Quechua epistemic system. Through the application of this method, I come to an understanding of my study participants' 'felicity conditions' for the use of Cuzco Quechua epistemics.

In order to assist my creation of the Subjective Reaction Test, I carried out an in depth interview with my key informant, Georgina Maldonado Gómez, regarding her intuitions about using the Quechua epistemics in discourse.

Also, I carried out an in depth Subjective Reaction Test with Alberto Qqenaya Vásquez, one of the few among my study participants to attend a university. He is currently attending the UNSAAC in Cuzco, *Universidad Nacional de San Antonio Abad Cusco*, earning a degree in Education. Furthermore, Vásquez is currently serving as the General Secretary of the *Asociación de Cargadores de Soga del Cusco*, 'Association of Rope Carriers in Cuzco', and as a member of the Managerial Council of the 'Gregorio Condori Mamani' Civil Association. Vásquez went

over each of the Subjective Reaction Test questions carefully with me, voicing his thought processes regarding each question. Vásquez's 'thinking aloud', offered me further insight into his use and interpretation of the Cuzco Quechua epistemics as well as insight into the strengths and weaknesses of my test questions.

In order to avoid the possibility of my participants' responses being influenced by the order in which they were presented with the Subjective Reaction Test items, I created four versions of my Subjective Reaction Test: Version 1a, Version 1b, Version 2a and Version 2b. Both Version 1a and Version 1b first present an identical certainty ranking exercise. Also, both Version 2a and Version 2b first present an identical certainty ranking exercise. However, Versions 1a and 1b present the sentences of the certainty ranking exercise in a different order than that found in Versions 2a and 2b.

Furthermore, the multiple-choice questions found in Versions 1a and 1b employ different combinations of the Quechua epistemic suffixes than do those of Versions 2a and 2b. Also, the 'a' versions differ from the 'b' versions of the same number simply in that the 'a' versions present the questions from 1 through 35, while the 'b' versions first present questions 16 through 35, followed by questions 1 through 15. Moreover, the possible responses for each multiple-choice question in Versions 1a and 1b are listed in a different order than those of Versions 2a and 2b. I have included Versions 1a and 2a of my Subjective Reaction Test in the appendix.

3.3.8. Ethnography

"Ethnography is the description of how particular ways of being, acting, and talking make sense to the people who engage in them" (Johnstone, 2000:100). I have carried out ethnographic activities, including participant observation and the ethnography of

communication, among my study participants. I entered the world of my participants in order to gain access to their local knowledge as they carried out the practices of their everyday lives. According to Johnstone (2000:82), participant observers "…try to uncover and record the unspoken common sense of the group they are studying…"

Specifically, I carried out participant observation while spending time with, getting to know, and interacting with my study participants and the administrators of both CAITH and the CdC during each of my three field seasons. For example, I spent time with study participants at both CAITH and the CdC, chatting in Spanish and in Quechua, watching television, eating and drinking, playing games, and helping with homework. During my 2001 and 2002 field seasons, I purchased soccer jerseys for the CdC soccer team. I was then privileged to receive the title of *madrina de los polos*, 'soccer jersey godmother', and invited to watch their soccer team play. In 2001, with the company of a few CAITH study participants, I purchased potted trees for the CAITH dining room.

At CAITH in 2002 and at the CdC in 2003, I served as a volunteer English instructor. During my 2003 field season, I also served as a volunteer art instructor at both CAITH and the CdC. Also, during my 2003 field season, I served as a volunteer instructor of dance and computers at CAITH. Furthermore, in 2003, I observed the work of *cargadores*, 'carriers', and *estibadores*, 'stevedores', first-hand at a few markets in and near the city of Cuzco. During my three field seasons, I was also fortunate to have been able to participate in a variety of other activities at CAITH and the CdC, such as parties and a *Día del cargador* 'Carrier's day' celebration.

Through my participation in the variety of activities mentioned above, I was afforded opportunities to observe and interact with my study participants at times other than during our

interview sessions. Also, because I involved myself with the general life of CAITH and the CdC, many of my study participants had already met me before my carrying out interviews with them. Also, in the case of those who had not met me before carrying out an interview, often their friends had met me already and encouraged these new participants to work with me. Mutual familiarity and trust between each of my study participants and me led to very successful interview sessions and data collection. I do not perceive any differences in my study participants' linguistic behavior in informal situations observed by me versus our interview sessions.

In his work, *The Professional Stranger*, Agar (1996:38) provides the reader with valuable insight into approaching the task of doing ethnography when he states, "If you just stop asking people questions framed in terms of the way you already see things, if you just listen and struggle with what passions and patterns drive their talk, you get a glimmer of a different kind of life." Furthermore, Agar (1996:58) states that ethnography "…involves long-term association with some group, to some extent in their own territory, with the purpose of learning from them their ways of doing things and viewing reality."

In order to systematize my observations, as I carried out an ethnography of communication, I applied the SPEAKING heuristic, proposed by Dell Hymes (1972, cited in Johnstone 2000:96), to my analysis of communicative events occurring among my study participants. Through an ethnographic approach to the analysis of my study participants' discourse that incorporates concepts from both speech act theory and interactional sociolinguistics, following Gumperz, I gain insight into my participants' communicative competence and the ways in which they use language to "reflect macro-level social meanings

(e.g. group identity, status differences) and create micro-level social meanings (i.e. what one is saying and doing at a moment in time)" (Schiffrin, 1994:102).

3.3.9. Spontaneous Recorded Conversation and Informal Interviews

During my 2003 field season, in order to gather naturalistic data to support my claims, while engaging in participant observation, I conducted informal recorded interviews and recorded some spontaneous conversations among my participants in both Spanish and Quechua.

3.3.10. Social Network Interview

During my 2003 field season, I carried out interviews in order to investigate the facts of my participants' social networks. McLaughlin (1978b) recognizes the importance of one's social network on second language acquisition and has claimed that there is no influence from the native language in child second language acquisition unless the child is isolated from peers who speak the target language natively.

Lesley and James Milroy are credited with the development of the use of social network investigations in sociolinguistics and have written extensively on the topic during the 1980s and 1990s. A focus of many of Milroy and Milroy's studies has been to understand the role of the social network in patterns of linguistic variation and mechanisms of linguistic change (1992:1). They explain,

> A social network may be seen as a boundless web of ties that reaches out through a whole society, linking people to one another, however remotely. But for practical reasons the analyst studies social networks as 'anchored' to individuals, and interest has most often focused on relatively strong first-order network ties – that is, those persons with whom *ego* directly and regularly interacts (Milroy & Milroy, 1992:5).

Also, through the study of social networks, we may come to understand the "community-level mechanisms that underlie processes of language maintenance" (Milroy & Milroy, 1992:6). My Social Network Interview instrument may be found in the appendix.

3.3.11. Individual Case Studies

Moreover, during my 2003 field season, in order to further understand my participants' worldviews and perspectives, I carried out more extensive recorded discussions with four inhabitants of CAITH and three inhabitants of the CdC about their lives, their experiences living in their rural communities of origin, their decision to migrate to Cuzco, their experiences upon first arriving in Cuzco, and their future plans. The reader may find a set of questions that guided these discussions in the appendix.

3.3.12. Language Attitudes Interview

I used Vassberg's (1993) work, *Alsatian Acts of Identity: Language Use and Language Attitudes in Alsace*, and Hornberger's (1989) work, *Haku Yachaywasiman: la educación bilingüe y el futuro del quechua en Puno*, as the main references for my creation of the Language Attitudes Interview that I carried out during my 2003 field season. Vassberg (1993:147) cites the work of Hofman (1977) and Mejías & Anderson (1988: 402) in her description of four dimensions of language attitudes, the 'value dimension', the 'communicative dimension', the 'instrumental dimension', and the 'sentimental dimension':

> …the value dimension is related to the more lasting and perceived intrinsic worth of the language; the communicative dimension deals with 'public understanding, transmitting and communicating information, and interpersonal communication' in a language; instrumentalism refers to personal benefit and practical usefulness derived from choosing to speak a certain language; and the sentimental dimension refers to personal satisfaction and emotions evoked by the use of language.

In carrying out my Language Attitudes Interview, I had the following six goals in mind: (1) to discover what aspects of the Quechua language and what aspects of the Spanish language are valued by my study participants, (2) to discover whether the reasons given for valuing Quechua and Spanish are connected to the value, communicative, instrumental, or sentimental dimensions of language attitudes, (3) to discover attitudes toward Quechua and Spanish speakers, (4) to assess attitudes toward the teaching or promotion of Quechua, (5) to discover attitudes regarding the cross-linguistic influence of Quechua on Spanish and of Spanish on Quechua, and (6) to determine which social domains (regarding physical places and conversational participants), are perceived as appropriate for the use of Quechua and the use of Spanish. I have included my Language Attitudes Interview in the appendix.

3.3.12.1. Cuzco Language Attitudes

The two speech communities under investigation here, the CdC and CAITH, do not exist in a vacuum. Therefore, in order to understand how the language attitudes of the larger Cuzco community affect my participants, I carried out some investigation of the language attitudes and language practices of the larger speech communities that my participants are members of or come in contact with. The language attitudes and ideologies conveyed by larger, more powerful, speech communities play a role in molding the attitudes of my study participants. Agar (1996:8,11) refers to such background investigation as the study of history, social geography, and political economy.

Specifically, I carried out Language Attitudes interviews with three members of the CAITH administration (Vittoria Savio Gilardi, Ronald Zárate Herrera, and Elsy Rivas Holgado), the Director of the CdC (Luis Alberto La Torre), the *Defensoría del Pueblo* ('local ombudsman':

Silvio Campana), a high-ranking primary education representative of the Cuzco Ministry of Education (Ciro Concha), the President of the Academy of the Quechua Language (Corsino Gutiérrez Guzmán), and Peruvian Congresswoman Paulina Arpasi Velásquez (a native speaker of Aymara).

4. Results: Research Goal 1

As mentioned above, my first research goal is to investigate the semantics and pragmatics of the Cuzco Quechua epistemic system, including the epistemic suffixes, *-mi/-n* and *-si/-s*, and the Quechua past tenses, *-rqa-* and *-sqa-*. Here I present my findings obtained through a variety of different methods and examine whether this epistemic system is affected by the SPEAK discourse factors described above as well as three 'Distance' discourse factors, described below.

In above sections, I have examined conflicting claims made regarding the semantics and pragmatics of the Quechua epistemic system. Furthermore, above, I have examined claims made by Hispanic linguists, who attribute certain structures in Andean Spanish to influence from the Quechua epistemic system. However, without a clear understanding of the semantic scope and pragmatic function of the epistemics in Quechua, attributing Andean Spanish structures to the influence of these epistemic markers is problematic.

4.1. Summary of the Issues

Firstly, as discussed above, a major point of contention in the literature involves delineating the Quechua epistemic system. While some investigators only identify the epistemic enclitics, *-mi/-n*, *-si/-s*, and *-chá*, as comprising the epistemic system (Klee and Ocampo (1995), Lipski (1996), Nuckolls (1993), Hurtado de Mendoza Santander (2001), Weber (1986), and Escobar (1997)), others include the Quechua past tense verb suffixes, *-rqa-* and *-sqa-* as well, (Lee (1997), Germán de Granda (2001), Dedenback-Salazar Sáenz (1997), and Cusihuaman

(1976;2001)). Faller (2002) focuses her work on only the epistemic enclitics. Faller (2002) claims that while it is possible that *-sqa-* may have some epistemic uses, she recognizes only *-mi/-n*, *-si/-s*, and *-chá* as comprising the Cuzco Quechua epistemic system. Faller (2002) does not recognize *-rqa-* as having any epistemic functions.

Within this work, I claim that the suffixes, *-mi/-n*, *-si/-s*, and *-chá*, as well as the verb past tenses, *-rqa-* and *-sqa-*, comprise the Cuzco Quechua epistemic system. I do not focus this investigation on the use of *-chá* because there is little or no disagreement in the literature regarding this member of the epistemic system. Including the verb past tenses, *-rqa-* and *-sqa-*, in my investigation of the Quechua epistemic system makes sense based on the facts that I have argued in the Literature Review that epistemics are inherently a verbal category, as are tense and aspect, and based on the cross-linguistic evidence that epistemics have been found to be derived from verbs and may simultaneously convey tense and aspect, as in Salar (Dwyer 2000) and as in Sherpa (Woodbury 1986).

Also discussed above, another major point of debate in the literature involves whether the Quechua epistemic system should be thought to primarily encode a distinction of information source or of varying degrees of certainty. While some investigators recognize information source as the primary distinction made by the Quechua epistemics, with *-mi/-n* and *-rqa-* indicating first-hand knowledge, *-si/-s* and *-sqa-* indicating second-hand knowledge, and *-chá* indicating conjecture (Klee and Ocampo (1995), Lipski (1996), and Escobar (1997) for the suffixes and Cusihuaman (1976;2001), Germán de Granda (2001), and Lee (1997) for the suffixes as well as for the past verb tenses), others, such as Nuckolls (1993), find *-mi/-n* to primarily encode a high degree of certainty. Hurtado de Mendoza Santander (2001) finds *-mi/-n*

to primarily be an indicator of high certainty but claims that *-si/-s* indicates an indirect information source.

Still other investigators claim that the Quechua epistemic markers may encode meaning beyond information source and level of certainty. For instance, Weber (1986) finds the epistemic markers to convey speakers' involvement with or responsibility for the information being discussed. Finally, Faller (2002:168) suggests that the *-mi/-n* of Cuzco Quechua indicates that the speaker has the "best possible or strongest evidence in relation to the type of information conveyed" and that *-si/-s* simply indicates that information was obtained through indirect experience. Based on the findings I will present here, I also find evidence to support the claim that the Quechua epistemics encode meaning beyond information source and level of certainty.

4.2. Ranking the Epistemic System for Certainty

As mentioned above, during my 2003 field season, I employed a type of Subjective Reaction Test with my study participants in order to examine the semantics and pragmatics of the Cuzco Quechua epistemic system. This test involved two separate sections, including a certainty ranking exercise and multiple-choice questions.

As my study participants have varying levels of literacy in Quechua and since different competing orthographic systems exist for writing Quechua, I went through the Subjective Reaction Test along with each participant, read the test items aloud as the participant read along silently and then asked for the participant's responses. As the findings I present here do not match the hypothesis I had regarding the Cuzco Quechua epistemic system at the time of having my participants take the Subjective Reaction Test, I rule out the possibility that my reading

through the Subjective Reaction Test items aloud had any significant influence on my participants' responses.

Firstly, here, I present my findings for the certainty ranking section. As mentioned above, in order to avoid the possibility of my participants' responses being influenced by the order in which they were presented with the Subjective Reaction Test items, I created four versions of my Subjective Reaction Test: Version 1a, Version 1b, Version 2a and Version 2b. Both Version 1a and Version 1b first present an identical certainty ranking exercise, which I present below. Also, both Version 2a and Version 2b first present an identical certainty ranking exercise, as I show below. However, Versions 1a and 1b present the sentences of the certainty ranking exercise in a different order than that found in Versions 2a and 2b.

In Versions 1a and 1b, study participants were instructed to rank the following six sentences in order of certainty, with a rank of '1' indicating that the speaker saying the sentence would be the most sure of himself/herself and with a rank of '6' indicating that the speaker saying the sentence would be the least sure of himself/herself. Each of these sentences may be translated as 'The young men and women unearthed the potatoes'.

Versions 1a and 1b Certainty Ranking Exercise:

Waynasipaskuna papata**n** ayllasha**sqa**ku.
Waynasipaskuna papata**n** ayllasha**rqa**nku.
Waynasipaskuna papata ayllasha**rqa**nku.
Waynasipaskuna papata ayllasha**sqa**ku.
Waynasipaskuna papata**s** ayllasha**rqa**nku.
Waynasipaskuna papata**s** ayllasha**sqa**ku.

Study participants given Versions 1a and 1b of the Subjective Reaction Test were presented with the sentences above in the order that they appear above.

In Versions 2a and 2b, study participants were given the same instructions and presented with the same six sentences above but in the following order:

Versions 2a and 2b Certainty Ranking Exercise:

Waynasipaskuna papata**n** ayllasha**sqa**ku.
Waynasipaskuna papata**s** ayllasha**rqa**nku.
Waynasipaskuna papata ayllasha**sqa**ku.
Waynasipaskuna papata**s** ayllasha**sqa**ku.
Waynasipaskuna papata ayllasha**rqa**nku.
Waynasipaskuna papata**n** ayllasha**rqa**nku.

Study participants given Versions 2a and 2b of the Subjective Reaction Test were presented with the sentences above in the order that they appear above. Furthermore, bold and underlined text was applied in this way on the test instruments presented to the study participants.

The six Quechua sentences presented to the study participants contain all of the possible combinations of the suffixes and past verb tenses of the Quechua epistemic system, including the absence of an epistemic suffix, represented here as 'Ø'. In Table 3 below, I present these six possible combinations:

Table 3. Cuzco Quechua suffix-verb tense combinations

(1)	Ø	+	-rqa-
(2)	-mi/-n	+	-rqa-
(3)	-si/-s	+	-rqa-
(4)	Ø	+	-sqa-
(5)	-mi/-n	+	-sqa-
(6)	-si/-s	+	-sqa-

Sixteen CAITH and sixteen CdC participants took Versions 1a or 1b of the Subjective Reaction Test while fourteen CAITH and fifteen CdC participants took Versions 2a or 2b of the Subjective Reaction Test. Therefore, a total of 61 study participants performed this certainty ranking exercise.

I calculated the average rank scores assigned to each of the six sentences by my participants in Versions 1a and 1b as well as in Versions 2a and 2b and found that on average, all study participants ranked the six sentences in the following way for both Versions 1a and 1b and Versions 2a and 2b:

Certainty Ranking for Versions 1a, 1b, 2a, and 2b of the Subjective Reaction Test:

1. Waynasipaskuna papata ayllasha**rqa**nku.
2. Waynasipaskuna papata**n** ayllasha**rqa**nku.
3. Waynasipaskuna papata**s** ayllasha**rqa**nku.
4. Waynasipaskuna papata ayllasha**sqa**ku.
5. Waynasipaskuna papata**n** ayllasha**sqa**ku.
6. Waynasipaskuna papata**s** ayllasha**sqa**ku.

This ranking corresponds to the order in which I presented the possible suffix-verb tense combinations above in Table 3.

Below, in Table 4, I present the average rankings and standard deviations of the rankings for these six sentences. In Table 4, sentences numbered 1 through 6 correspond to the sentences numbered 1 through 6 found immediately above. In other words, the way in which these sentences are listed below corresponds to the way in which all subjects ranked these sentences for certainty on average.

Table 4. Average rankings and standard deviations of the rankings for the six sentences in Versions 1a, 1b, 2a, and 2b of the Subjective Reaction Test

Sentence	Ver. 1a & 1b Avg. Rankings	Ver. 1a & 1b St. Dev.	Ver. 2a & 2b Avg. Rankings	Ver. 2a & 2b St. Dev.
1.	2.41	1.46	2.62	1.74
2.	2.84	1.59	3.14	1.60
3.	3.16	1.14	3.31	1.47
4.	3.88	1.56	3.66	1.72
5.	4.00	2.05	3.83	1.69
6.	4.72	1.33	4.45	1.59

Therefore, as shown in Table 4, on average, all study participants ranked sentence '1', which contains no epistemic suffix 'Ø', and the *-rqa-* past tense, as indicating the highest certainty level. Thus, the average certainty rankings for this sentence are the lowest numbers (closest to '1' for highest certainty) in the 'Versions 1a and 1b Average Rankings' (an average ranking of 2.41) and 'Versions 2a and 2b Average Rankings' (an average ranking of 2.62) columns above.

Curious as to whether these two sets of results (for Versions 1a and 1b and for Versions 2a and 2b) represent any significant differences between the sentence rankings, I performed a Oneway Analysis of Variance (ANOVA) on these two sets of results at alpha = 0.05. I present summary tables of these two Oneway ANOVA procedures below.

Table 5. Oneway ANOVA for Versions 1a and 1b Certainty Rankings

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	115.875	5	23.175	9.706	.000
Within Groups	444.125	186	2.388		
Total	560.000	191			

Table 6. Oneway ANOVA for Versions 2a and 2b Certainty Rankings

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	57.155	5	11.431	4.264	.001
Within Groups	450.345	168	2.681		
Total	507.500	173			

Both Oneway ANOVA test procedures reveal that there are indeed statistically significant differences among the averages for the six sentences in both Versions 1a and 1b ($p = 0.000$) and Versions 2a and 2b ($p = 0.001$).

In order to investigate these statistically significant differences further, I conducted Tukey's HSD Post Hoc Tests for Homogeneous Subsets at alpha = 0.05 on both data sets. Below, I present tables with this output.

Table 7. Tukey's HSD Post Hoc Test for Homogeneous Subsets for Versions 1a and 1b

		Subset for alpha = .05			
SENTENCE	N	1	2	3	4
1	32	2.4063			
2	32	2.8438	2.8438		
3	32	3.1563	3.1563	3.1563	
4	32		3.8750	3.8750	3.8750
5	32			4.0000	4.0000
6	32				4.7188
Sig.		.380	.086	.250	.250

Means for groups in homogeneous subsets are displayed.

Table 8. Tukey's HSD Post Hoc Test for Homogeneous Subsets for Versions 2a and 2b

		Subset for alpha = .05	
SENTENCE	N	1	2
1	29	2.6207	
2	29	3.1379	
3	29	3.3103	3.3103
4	29	3.6552	3.6552
5	29	3.8276	3.8276
6	29		4.4483
Sig.		.061	.092

Means for groups in homogeneous subsets are displayed.

Upon examination of Table 7 above, we find that in the rankings for Versions 1a and 1b, sentences 1, 2, and 3, corresponding to the (1) Ø + *-rqa-*, (2) *-mi/-n* + *-rqa-*, and (3) *-si/-s* + *-rqa-* suffix-verb tense combinations, are statistically different from sentences 4, 5, and 6, corresponding to the (4) Ø + *-sqa-*, (5) *-mi/-n* + *-sqa-*, and (6) *-si/-s* + *-sqa-* suffix-verb tense combinations. In other words, the mean certainty rankings for sentences 1, 2, and 3 are not found within the same homogeneous subset as are the mean certainty rankings for sentences 4, 5, and 6. Furthermore, in Table 7, we may observe that sentence 1, corresponding to the Ø + *-rqa-*

suffix-verb tense combination, and sentence 6, corresponding to the *-si/-s* + *-sqa-* suffix-verb tense combination, are not found in more than one homogeneous subset.

Upon examination of Table 8 above, we find that in the rankings for Versions 2a and 2b, sentences 1 and 2, corresponding to the Ø + *-rqa-* and *-mi/-n* + *-rqa-* suffix-verb tense combinations, are statistically significantly different from sentence 6, corresponding to the *-si/-s* + *-sqa-* suffix-verb tense combination. In other words, sentences 1 and 2 are not found in the same homogeneous subset as sentence 6.

These data provide evidence for the notion that the past tense verb suffixes in opposition, *-rqa-* and *-sqa-*, distinguish higher and lower levels of certainty, respectively. Secondarily, these data show that the lack of an epistemic suffix, 'Ø', followed by *-mi/-n*, followed by *-si/-s*, distinguish higher to lower levels of certainty, respectively. Therefore, these findings suggest that claiming that the epistemic suffixes and past verb tenses in question only distinguish direct and indirect information source would be an incomplete account. While it is not possible to conclude from these findings that distinguishing certainty level is the primary function of the Cuzco Quechua epistemic system, we may conclude that distinguishing certainty level is at the very least one function of the epistemic system.

4.3. Testing the SPEAK Discourse Factors

The second section of the Subjective Reaction Test, which I carried out during my 2003 field season, involves presenting study participants with multiple-choice questions. These multiple-choice questions were designed in such a way as to test whether the SPEAK discourse factors I describe above, along with three added 'Distance' factors described below, are perceived by my participants as influencing their use of the Cuzco Quechua epistemic system.

Immediately below, I repeat my presentation of an outline of my proposed SPEAK discourse factors:

1.) (S) Source of information: How was the information under discussion gathered by the speaker(s)?

a. Sensory evidence (whether information is gathered through seeing, hearing, feeling, smelling, tasting)

b. In action/motion (whether one witnesses action in motion or as in a photograph)

c. Printed matter (whether information is gathered from reading newspapers, books)

d. Alternate states of consciousness (whether information is gathered while the speaker is asleep, drunk)

e. Evidence (whether one observes the effects of some event under discussion)

f. Modern media (whether information is transmitted through television, radio, telephone)

g. Trustworthy messengers (whether one receives information from a trusted person, such as a family member or close friend)

h. Witness/Nonwitness (whether the information was gathered through first-hand or second-hand experience)

2.) (P) Participation: What was the nature of the speaker's involvement in the action/event under discussion?

a. Agency (whether one performed some action being discussed)

b. Intent (whether one intended to perform some action being discussed)

c. Participant (whether one directly participates in an event or merely observes from afar)

3.) (E) Effect on speaker(s) and hearer(s): How will the transmission of information about the event under discussion potentially effect the speaker(s) and the hearer(s)?

a. Speaker's personal interest (whether the speaker has something to gain or lose from transmitting information in a particular way)

b. Message content (whether the information is good or bad news)

c. Potential impact on the hearer (the influence that transmission of the message may have on the hearer)

4.) (A) Attitude toward the truth value: What is the speaker's attitude toward the truth of the information he/she is transmitting?

a. Truth value (whether the information is true or false)

b. Collective/widespread knowledge (whether the information communicated is considered to be common knowledge among the members of some speech community)

c. Probability (whether something is likely)

d. Certainty (how certain or doubtful someone is regarding the truth of the information being communicated)

5.) (K) Kind of interlocutors involved: What are the characteristics of those involved in talking about the event?

a. Age (how old the speaker(s) is/are)

b. Gender (whether the speaker(s) is/are male or female)

c. Relationship (what the relationship is of the interlocutors to each other)

4.3.1. A Key Informant's Subjective Reactions

As each of the five SPEAK discourse factors listed above contains various sub-points, testing every suffix-verb tense combination with every sub-point listed above would result in a very lengthy test instrument. As my study participants were able to spend only limited amounts of time with me and in order to prevent my study participants from losing attention and interest while going through the Subjective Reaction Test, I felt it necessary to narrow the focus of this test instrument. Furthermore, in the interest of having as many study participants as possible take this Subjective Reaction Test, the use of a shorter, well-focused test was necessary.

To determine the focus of the Subjective Reaction Test multiple-choice questions, I first carried out in-depth interviews with my key informant, Georgina Maldonado Gómez, regarding her intuitions on using the Quechua epistemics in discourse. Gómez considered some of the SPEAK sub-points listed above to be important factors in determining her use of the various Quechua suffix-verb tense combinations. Furthermore, discussions with Gómez revealed that she perceived three other discourse factors not listed above as also playing a role in her use of the Quechua epistemic system. I designate these three additional factors 'Distance' discourse factors. These three 'Distance' factors indicate various 'Temporal', 'Spatial', and

'Psychological' discourse distances. I define these 'Distance' discourse factors in the following way:

Temporal Distance: whether the event under discussion occurred relatively recently (if yes = Close Temporal Distance) or in the more distant past (if yes = Far Temporal Distance).

Spatial Distance: whether the topic under discussion involves items that are present and physically accessible to Speaker and Hearer while discussing the topic, and whether the event occurred within the general vicinity of Speaker and Hearer (if yes = Close Spatial Distance) (if no = Far Spatial Distance).

Psychological Distance: whether Speaker and Hearer are familiar with and are interested in the people who participated in the event and the topic of the event under discussion (if yes = Close Psychological Distance) (if no = Far Psychological Distance), whether Speaker was surprised by the event or did not expect the event (if yes = Far Psychological Distance) (if no = Close Psychological Distance), whether Speaker was proud or ashamed of his/her participation in the event under discussion (if proud = Close Psychological Distance) (if ashamed = Far Psychological Distance), whether Speaker agrees or disagrees with the content of the message that he/she is conveying (if agrees = Close Psychological Distance) (if disagrees = Far Psychological Distance), and whether Speaker puts the content of the message that he/she is conveying into question (if yes = Far Psychological Distance) (if no = Close Psychological Distance).

Hill and Irvine (1993:7) use the term, 'distance', in application to situations in which reported speech is used by a speaker who may wish to 'distance' himself "…from an utterance deemed somehow reprehensible".

Below, I summarize Gómez' intuitions on the effects of the SPEAK and 'Distance' discourse factors on her own use of the Quechua epistemic system. Here, '(S)', '(P)', and '(A)' represent the same 'S', 'P', and 'A' as in the acronym, SPEAK. Also, '(T.D.)' stands for 'Temporal Distance', '(S.D.)' stands for 'Spatial Distance', and '(P.D.)' stands for 'Psychological Distance':

Gómez' intuitions on the effects of the SPEAK and 'Distance' discourse factors:

Ø + -rqa:
(S) Speaker gathered the information through smell.
(S) Speaker saw the event occur on television.
(S) Someone (A) trusted by Speaker told Speaker what he/she (A) did.
(P) Speaker performed the action voluntarily.
(A) Speaker is sure that the event must have happened.
(T.D.) The event happened in the recent past.
(P.D.) Speaker performed an action that he/she was ashamed of.

-mi/-n + -rqa:
(S) Speaker saw the event happen.
(S) Speaker heard the event happen through his/her own ears.
(S) Someone (A) trusted by Speaker told Speaker what he/she (A) did.
(P) Speaker performed the action.
(P) Speaker participated in the event under discussion.
(P.D.) Those involved in carrying out the event are known and of importance to Speaker.

-si/-s + -rqa:
(T.D.) The event happened in the recent past.
(P.D.) Someone informed Speaker about an action carried out by some other third party.

Ø + -sqa:
(S) Speaker gathered the information through touch.
(S) Speaker gathered the information through taste
(S) Speaker saw a blurry photo of the event under discussion.
(S) Speaker read about the event in a respected source.
(S) Speaker dreamt about the event.
(S) Speaker was drunk during the occurrence of the event under discussion.
(P) Speaker does not appear in the photo under discussion.
(P) Speaker was not present when the photo under discussion was taken.
(P) Speaker performed the action by mistake, without will.
(T.D.) The event happened in the more distant past.
(S.D.) Speaker cannot show the photo under discussion to Hearer at the time of the discussion.
(P.D.) Speaker knows that Hearer is not very interested in the topic of the photo under discussion.
(P.D.) Speaker is not familiar with the situation of the photo under discussion.
(P.D.) Someone trusted by Speaker informed Speaker and Speaker did not expect the event.
(P.D.) Speaker was surprised by the event.

-mi/-n + -sqa:
(S) Speaker saw the event happen.
(P.D.) Speaker was surprised by the event.

-si/-s + -sqa:
(S) Speaker read about the event in an unrespected and untrustworthy source.
(S) Someone unknown to Speaker (A) tells Speaker about what he/she (A) did.
(S) Someone unknown to Speaker tells Speaker about what a third party did.
(S.D.) Speaker heard about the event on the radio and the event took place far away.
(P.D.) Someone tells Speaker about what a third party has done.

Therefore, in general, Gómez uses the Quechua epistemic suffix-verb tense combinations above in the following way:

Summary of Gómez' intuitions about the effects of the SPEAK and 'Distance' discourse factors:

Ø + -rqa:

- Direct sensory evidence (smell)
- Mediated sensory evidence (sight through television)
- Information from a trusted person about an event in which that trusted person directly participated

- Direct participation of Speaker
- Speaker intended to perform the action
- High level of certainty
- Close Temporal Distance
- Psychological Distance (conflicting results)

-mi/-n + -rqa:

- Direct sensory evidence (sight and hearing)
- Information from a trusted person, about an event in which that trusted person directly participated
- Direct participation of Speaker
- Speaker was an agent in the event under discussion
- Close Psychological Distance

-si/-s + -rqa:

- Close Temporal Distance
- Far Psychological Distance

Ø + -sqa:

- (Questionable) mediated sensory evidence (sight through blurry photos)
- Information from a trusted print source
- Speaker's dreams
- Speaker was under the influence of alchohol
- Speaker did not participate willingly
- Far Temporal Distance
- Far Spatial Distance
- Far Psychological Distance

-mi/-n + -sqa:

- Direct sensory evidence (sight)
- Far Psychological Distance

-si/-s + -sqa:

- Information from an untrustworthy print source
- Information from an untrustworthy person
- Far Spatial Distance
- Far Psychological Distance

Therefore, according to Gómez, each of the suffix-verb tense combinations may be applied in a number of different situations. For example, Gómez claimed to use the suffix-verb tense combination, *-mi/-n + -rqa-*, for both situations in which she was an agent in an event under discussion as well as in situations in which she received information from a trusted person about an event in which that trusted person had directly participated. Therefore, all of the bullet points listed under each suffix-verb tense combination need not apply to every situation in which the suffix-verb tense combination is used. Rather, at least one of the bullet points must apply,

thereby requiring the use of the specific suffix-verb tense combination under which it is listed. Thus, the bullet points listed under each suffix-verb tense combination should be read in the following way: either the first bullet point applies, and/or the second, and/or the third, etc..

In discourse, Quechua-speaking individuals who employ epistemics while describing past events or states may use one of the six possible epistemic suffix-verb tense combinations. Also, depending on the individual's perceptions and the context, more or less of the discourse factors may apply, demanding the use of one suffix-verb tense combination over another. In her work, *The Linguistic Individual* (1996), Barbara Johnstone discusses the importance of addressing the role of the individual in linguistic inquiry.

In general, the summary points listed above show that Gómez ranks the suffix-verb tense combinations on various continua in the following order: (1) Ø + *-rqa-*, (2) *–mi/-n* + *-rqa-*, (3) *–si/-s* + *-rqa-*, (4) Ø + *-sqa-*, (5) *–mi/-n* + *-sqa-*, (6) *–si/-s* + *-sqa-*. Generally, for Gómez, combinations (1) through (6) may indicate higher to lower levels of certainty, more trustworthy to less trustworthy sources of information, more Speaker participation to less Speaker participation, and Closer to Farther Temporal, Spatial, and Psychological Distances.

4.3.2. Total Population Subjective Reactions

Using Gómez' responses and intuitions as a guide, I created multiple-choice questions for the Subjective Reaction Test that focus mainly on testing Gómez' intuitions about the influence of the SPEAK and 'Distance' discourse factors on the use of the Quechua epistemic system. However, some other questions were added to the test, including some that test SPEAK discourse factors not perceived by Gómez as being influential.

Versions 1a and 1b and Versions 2a and 2b of the Subjective Reaction Test each contain 35 different multiple-choice questions in which study participants are asked to determine what the semantic meaning, pragmatic function, or discourse context would most likely be for a speaker to say a certain sentence in Quechua. All of these multiple-choice questions have two possible answers, 'a' or 'b'.

First, I determined the frequencies for the study participants' 'a' and 'b' answers for each of the 35 multiple-choice questions. Next, in order to determine whether the 'a' and 'b' frequencies were statistically significantly different from each other, I performed Pearson Chi-square tests at alpha = 0.05 and one degree of freedom on each of the 35 questions for both Versions 1a and 1b and Versions 2a and 2b. Of the 35 multiple choice questions on Versions 1a and 1b, the total population's answers were found to be significantly 'a' or 'b' for 24 of these questions. Of the 35 multiple choice questions on Versions 2a and 2b, the total population's answers were found to be significantly 'a' or 'b' for 16 of these questions.

Below, I present only those results that are statistically significant for the total population of participants who took the Subjective Reaction Test.

Perceived effects of the SPEAK and 'Distance' discourse factors for the total population:

Ø + -rqa:
(S) Speaker gathered the information through sight.
(S) Speaker gathered the information through touch.
(S) Speaker gathered the information through taste.
(S) Speaker saw the event occur on television.
(S) Speaker saw a clear photo of the event under discussion.
(P) Speaker performed the action.
(P) Speaker performed the action voluntarily.
(P) Speaker appears in the photo under discussion.
(P) Speaker was present when the photo under discussion was taken.
(T.D.) The event happened in the more distant past.
(S.D.) Speaker can show the photo under discussion to Hearer at the time of the discussion.
(P.D.) Speaker performed an action that he/she was proud of.

-mi/-n + -rqa:
(S) Speaker gathered the information through sight and smell.
(S) Speaker gathered the information through hearing and touch.
(S) Speaker gathered the information through taste.
(S) Speaker gathered the information through sight and hearing.
(S) Someone trusted by Speaker told Speaker.
(P) Speaker performed the action under discussion.
(A) Speaker is sure that the event happened.
(P.D.) Speaker performed an action that he/she was proud of.
(P.D.) Speaker gathered the information through sight and was surprised by the event.

Ø + -sqa:
(S) Speaker gathered the information through touch.
(S) Speaker gathered the information through taste.
(S) Speaker read about the event in a respected source.
(S) Speaker was not drunk during the occurrence of the event under discussion.
(P.D.) Speaker was surprised by the event.

-mi/-n + -sqa:
(P.D.) Speaker gathered the information through sight and was surprised by the event.

-si/-s + -sqa:
(S) Someone trusted by Speaker told Speaker.
(S) Speaker read about the event in a respected source.
(E) Speaker anticipates receiving a punishment upon communicating the information.
(K) Speaker is a girl.

We may note, therefore, that each of the five SPEAK discourse factors and each of the three 'Distance' discourse factors has been found to be perceived by members of the total population of study participants who took the Subjective Reaction Test as influencing their use of the Cuzco Quechua epistemic system. In general, the total population uses the Quechua epistemic suffix-verb tense combinations above in the following way:

Summary of the perceived effects of the SPEAK and 'Distance' discourse factors for the total population:

Ø + -rqa
- Direct sensory evidence (sight, touch, taste)
- Mediated sensory evidence (sight through television and still photos)
- Speaker was an agent in the event under discussion
- Direct participation of Speaker in the event under discussion
- Speaker intended to perform the action
- Far Temporal Distance
- Close Spatial Distance
- Close Psychological Distance

-mi/-n + -rqa

- Direct sensory evidence (sight, smell, hearing, touch, taste)
- Information from a trusted person about an event
- Speaker was an agent in the event under discussion
- High level of certainty
- Psychological Distance (conflicting results)

Ø + -sqa

- Direct sensory evidence (touch, taste)
- Information from a trusted print source
- Speaker was not drunk during the event under discussion
- Far Psychological Distance

-mi/-n + -sqa

- Direct sensory evidence (sight)
- Far Psychological Distance

-si/-s + -sqa

- Information from a trusted person about an event
- Information from a trusted print source
- Speaker anticipates negative effects upon communicating the information
- Speaker is a girl.

In general, the summary above shows that, similar to the findings for Gómez, the total population ranks the suffix-verb tense combinations (with the absence of the *-si/-s + -rqa-* suffix-verb tense combination) on two continua in the following order: (1) Ø + *-rqa-*, (2) *-mi/-n + -rqa-*, (3) Ø + *-sqa-*, (4) *-mi/-n + -sqa-*, (5) *-si/-s + -sqa-*. In general, combinations (1) through (5) may indicate more Speaker participation to less Speaker participation and Closer to Farther Temporal, Spatial, and Psychological Distances.

The reader will note that in the 'Summary of the perceived effects of the SPEAK and 'Distance' discourse factors for the total population' presented above, my participants found the Ø + *-rqa-* suffix-verb tense combination to indicate 'Far Temporal Distance' but 'Close Spatial Distance' and 'Close Psychological Distance'. I propose that in fact, 'Close Temporal Distance' is indicated by the Ø + *-rqa-* combination based on all of the findings presented here for Research Goal 1 as well as the fact that the present tense in Quechua may be used to describe events that have occurred in the very recent past. Therefore, confusion in the case of indicating

'Far/Close Temporal Distance' may have stemmed from the fact that, as compared to using a verb in the present tense to describe an event that occurred in the very recent past, use of the *-rqa-* past verb tense may describe an event that occurred relatively less recently.

4.3.3. Alberto Qqenaya Vásquez' Subjective Reactions

In order to gain further insight into my study participants' responses to the Subjective Reaction test, I carried out a more in-depth Subjective Reaction Test with Alberto Qqenaya Vásquez, one of the few among my study participants to have attended a university. He is currently attending the UNSAAC in Cuzco, *Universidad Nacional de San Antonio Abad Cusco*, earning a degree in Education. Furthermore, Vásquez is currently serving as the Secretary General of the *Asociación de Cargadores de Soga del Cusco*, 'Association of Rope Carriers of Cuzco' and as a member of the Managerial Council of the 'Gregorio Condori Mamani' Civil Association. Vásquez went over each of the Subjective Reaction Test questions carefully with me, voicing his thought processes regarding each question. Vásquez' 'thinking aloud' offered me further insight into his use and interpretation of the Cuzco Quechua epistemics as well as insight into the strengths and weaknesses of my test instrument.

Vásquez' perceived effects of the SPEAK and 'Distance' discourse factors:

<u>Ø + -rqa:</u>
(S) Speaker saw the event occur on television.
(S) Speaker gathered the information through touch.
(S) Speaker saw a clear photo of the event under discussion.
(P) Speaker does not appear in the photo under discussion.
(P) Speaker was present when the photo under discussion was taken.
(A) Speaker believes the information is true.
(T.D.) The event happened recently.
(S.D.) Speaker cannot show the photo under discussion to Hearer at the time of the discussion.

-mi/-n and –rqa:
(S) Speaker gathered the information through sight.
(S) Speaker gathered the information through smell.
(S) Speaker gathered the information through hearing.
(S) Someone trusted by Speaker told Speaker.
(P) Speaker performed the action.
(A) Speaker believes the information is true.
(A) Speaker is sure that the event happened.
(P.D.) Speaker performed an action that he/she was proud of.

-si/-s and –rqa:
(P) Speaker was not present when the photo under discussion was taken.
(T.D.) The event happened in the more distant past.

Ø + -sqa:
(S) Speaker read about the event in a respected source.
(S) Speaker dreamt about the event.
(S) Speaker was not drunk during the occurrence of the event under discussion.
(S) Speaker gathered the information through taste.
(S) Speaker gathered the information through touch.
(P) Speaker performed the action by mistake, without will.
(A) Speaker is not sure that the event happened.
(P.D.) Speaker was surprised by the event.
(T.D.) The event happened in the recent past.

-mi/-n and –sqa:
(P.D.) Speaker was surprised by the event.

-si/-s and –sqa:
(S) Speaker read about the event in a disrespected, untrustworthy source.
(S) Someone trusted by Speaker told Speaker about what a third party did.
(S) Speaker did not gather the information though sight.
(S) Someone informed Speaker.
(E) Speaker does not anticipate receiving a punishment upon communicating the information.
(K) Speaker says this to Hearer and Hearer is an adult.
(K) Speaker is a girl.

As was the case for the total population, Vásquez finds each of the five SPEAK discourse factors and each of the three 'Distance' discourse factors to influence his use of the Cuzco Quechua epistemic system. In general, Vásquez uses the Quechua epistemic suffix-verb tense combinations above in the following way:

Summary of the effects of the SPEAK and 'Distance' discourse factors for Vásquez:

Ø + -rqa:

- Direct sensory evidence (touch)
- Mediated sensory evidence (saw on television, saw a clear photo)
- Direct participation of Speaker in the event under discussion
- Speaker believes the information is true
- Close Temporal Distance
- Far Spatial Distance

-mi/-n and –rqa:

- Direct sensory evidence (sight, smell, hearing)
- Information from a trusted person about an event
- Speaker was an agent in the event under discussion
- Speaker believes the information is true.
- High level of certainty
- Close Psychological Distance

-si/-s and –rqa:

- Non-participation of Speaker in the event under discussion
- Far Temporal Distance

Ø + -sqa:

- Direct sensory evidence (taste, touch)
- Information from a respected print source
- Speaker's dreams
- Speaker was not under the influence of alchohol
- Speaker did not perform the action willingly
- Low level of certainty
- Close Temporal Distance
- Far Psychological Distance

-mi/-n and –sqa:

- Far Psychological Distance

-si/-s and –sqa:

- Information from a disrespected, untrustworthy print source
- Information from a trusted person, about an event in which a third party directly participated
- No direct sensory evidence
- Information from someone about an event
- Speaker does not anticipate negative effects upon communicating the information
- Hearer is an adult
- Speaker is a girl.

In general, the summary above shows that, similar to the results for Gómez and for the total population, Vásquez ranks the suffix-verb tense combinations on various continua in the following order: (1) Ø + *-rqa-*, (2) *-mi/-n* + *-rqa-*, (3) *-si/-s* + *-rqa-*, (4) Ø + *-sqa-*, (5) *-mi/-n* + -

sqa-, (6) *-si/-s* + *-sqa*-. Generally, for Vásquez, combinations (1) through (6) may indicate higher to lower levels of certainty, more trustworthy to less trustworthy sources of information, and more Speaker participation to less Speaker participation.

4.4. Role Play Investigation

As mentioned above, during my 2002 field season, I engaged my study participants in a role-play activity, in which I asked them to tell me how they would respond if they were involved in a variety of different specific situations. I first provided my participants with short descriptions of situations, specifying the relationships among the characters in each situation. I used edited clip art drawings to assist my description of each situation presented to my participants. I used two similar sets of situations, one for the CdC and the other for CAITH. The main difference between these two sets of situations is that I made the protagonist male for the CdC and female for CAITH. In writing these role play situations, I created different contexts that I hypothesized might be important in determining the semantics and pragmatics of the Cuzco Quechua epistemic system. The situational contexts I created for the Role Play Interview both isolate and combine the five SPEAK discourse factors.

The findings for the Subjective Reaction Test, discussed in the previous section, indicate that 'Distance' discourse factors, along with the SPEAK discourse factors, influence the use of the Quechua epistemics. The three 'Distance' factors, 'Temporal Distance', 'Spatial Distance', and 'Psychological Distance', are very subjective. In the case of the 'Temporal Distance' factor, what may appear to have happened recently to one speaker may appear to another to have happened in the more distant past. In other words, we do not all perceive the passage of time in

the same manner. Similarly, with the 'Spatial Distance' factor, an event under discussion may appear to one speaker to have happened close by but to another may appear to have happened far away. One's particular travel experiences may influence the physical 'closeness' that one may feel to certain places. Finally, in the case of the 'Psychological Distance' factor, what may be familiar, interesting, surprising, and shameful to one speaker may be unfamiliar, uninteresting, completely expected, and a source of pride to another. As Temporal and Spatial Distance are discussed here as being subjective, classifying them as subtypes of Psychological Distance would be reasonable.

I find this subjectiveness of the 'Distance' factors to account for the high degree of variation I find in the responses of my study participants to the various Role Play situations. By creating the Role Play situations, I controlled the situation and context for discussion for my study participants. However, I was unable to control my study participants' background knowledge pertaining to the situations as well as how my study participants felt about each of the situations. Below, I present my interpretations of a variety of responses provided by study participants for the Role Play situations.

It should be noted that many of the Quechua responses below contain Spanish loan words. These Spanish loan words have been fully integrated into Quechua as the matrix language. For this reason, Spanish loan words are written with an orthography below that intends to reflect the Quechua pronunciation of these loans.

4.4.1. Direct Participation

In one Role Play situation, participants were asked to play the role of a girl who, while driving her mother's car, accidentally crashes into another car. Later, when this girl's mother asks what happened, three study participants responded in the following three ways:

(1) Noqa perdi-**ra-**ni control-ta awtu-manta.
I lose-**rqa**-1 control-ACC car-ABL
'I lost control of the car.'

(2) Ñaha maneha-ni-q karru-ta y huq awtu-man tupa-**ra-**ni.
before drive-1-AG car-ACC and a car-ILLA hit-**rqa**-1
'Earlier, I was driving the car and hit into another car.'

(3) Noqa-**n** karru-ta maneha-sha-**ra-**ni hinaspa mana allin-ta-chu
I-**mi** car-ACC drive-PROG-**rqa**-1 then no good-ADVL-NEG

qhawa-**sqa-**ni y qonqa-y-manta qhawa-qti-y-qa choka-**sqa-**ni carru-wan.
see-**sqa**-1 and careless-1-ABL see-SEQ-1-TOP crash-**sqa**-1 car-INSTR
'I was driving the car, then I didn't see well and (drove) carelessly, then I saw I crashed the car.'

In (1) and (2) above, we find the Ø + *-rqa-* suffix-verb tense combination. Above, according to the results of the Subjective Reaction test carried out on the population, this suffix-verb tense combination may indicate that the speaker was an agent in the event under discussion. As the situation here involves a speaker talking about an event in which she was the agent, this use of this suffix-verb tense combination supports this finding of the Subjective Reaction test.

In (3), we find both the *-mi/-n* + *-rqa-* and Ø + *-sqa-* suffix-verb tense combinations. Here, this study participant uses the *-mi/-n* + *-rqa-* combination while stating "I was driving the car". As for the Ø + *-rqa-* suffix-verb tense combination, the *-mi/-n* + *-rqa-* combination was also found in the results of the Subjective Reaction test to indicate that the speaker was an agent in the event under discussion. Therefore, this use of *-mi/-n* + *-rqa-* also supports this finding of the Subjective Reaction Test. When the speaker in (3) begins to tell of the difficulty she had, "then I didn't see well and (drove) carelessly, then I saw I crashed the car", we see a switch to

the Ø + *-sqa-* suffix-verb tense combination. According to the results of the Subjective Reaction Test, this combination may be used to indicate Far Psychological Distance on the part of the speaker. As crashing one's mother's car into another car is an action that destroys property and potentially may result in a loss of life, it is likely that this speaker would feel ashamed of her action. While role-playing, as this speaker chose to explain in a negative tone that she 'didn't see well' and drove 'carelessly', we may conclude that her crashing the car was an action that she was ashamed of. As I have defined Far Psychological Distance as applying to situations in which a speaker is ashamed of his/her actions or participation in an event, this use of Ø + *-sqa-* also supports the findings of the Subjective Reaction test.

4.4.2. Witnessing a car crash

In another Role Play situation, participants were asked to play the role of a boy who saw a man crash his car against the tree in front of the boy's father's house. Later, when his father asks what happened, one study participant responded:

(4) Huq carro-**n** choca-ra-pu-**sqa** huq mallki-man.
A car-**mi** crash-HORT-BEN-**sqa** one tree-ILLA
'A car crashed into a tree.'

In (4), we find the *-mi/-n* + *-sqa-* epistemic suffix-verb tense combination. As mentioned above, the total population found this combination to be used when the "Speaker gathered the information through sight and was surprised by the event". Therefore, while responding to this situation, this study participant imagined that he would have been surprised to see the man crash into the tree. Further evidence that this study participant is playing the role of a surprised speaker is that we find the hortative infix, *-ra* in the verb. According to Aráoz and Salas

(1993:154), *-ru*, which is realized as *-ra* before *-pu*, expresses the sudden and recent realization of an action.

Another study participant describing the same situation used the following verb:

(5) Choka-ra-pu-**ra**-n
crash-HORT-BEN-**rqa**-3
'He crashed.'

In (5), we find the Ø + *-rqa-* suffix-verb tense combination. Here again, the hortative infix, *-ru*, conveys the suddenness of the action. However, in this case, rather than using *-sqa-*, this study participant used *-rqa-*. Perhaps for this participant, the Close Spatial Distance of the event, found to be characteristic of the Ø + *-rqa-* suffix-verb tense combination for the total population, was perceived as primary.

4.4.3. Not witnessing an accident

In another Role Play situation, participants were asked to play the role of a boy who fell asleep on the job. While the boy was sleeping, his colleague/friend fell down from a ladder. Later, when the boy's boss asks the boy what happened, the boy doesn't want to tell the boss that he was sleeping, in fear of losing his job. One study participant responded:

(6) Llank'a-sha-qti-y-**mi** qonqa-lla-manta khumpa-y pasa-ya-mu-cha-**sqa.**
work-PROG-SEQ-1-**mi** careless-LIM-ABL friend-1 move-DIR-CIS-VBLZ-**sqa**
'While I was working, my friend carelessly fell down.'

In (6), we find the *-mi/-n* + *-sqa-* suffix-verb tense combination. As mentioned above, the total population found this combination to be used when the speaker gathered the information through sight and was surprised by the event. Therefore, *-sqa-* here may indicate the speaker's surprise at

his colleague's falling down. However, in this situation, although the boy was sleeping and did not see the event happen, this study participant places the *-mi/-n* on 'While I was working". If *-mi/-n* may be used to indicate having acquired the information through sight or certainty, then this study participant is using *-mi/-n* in order to create a false impression (i.e. that he was working and that he saw). Therefore, here, the study participant's use of the epistemic system does not represent reality but instead works to his own benefit, functioning to convince the boss that he was in fact working and witnessed the event in question.

Another study participant responded to the same situation in the following way:

(7) Mana-**n** ri-ku-ni-chu porque mana-**n** noqa chay ratu ka-sha-**rqa**-ni-chu.
no-**mi** see-REFL-1-NEG because no-**mi** I that while be-PROG-**rqa**-1-NEG
'I didn't see because I wasn't there at that moment.'

In (7), we find the *-mi/-n* + *-rqa-* suffix-verb tense combination. The results from the Subjective Reaction test for the total population show that this combination may be used when the speaker has a high level of certainty and when the speaker was an agent in the event under discussion. Therefore, in (7), the study participant may be indicating that he was an agent of his not being there at that moment and that he is very sure of his not being there at that moment. However, as the boy in the situation presented to this study participant for analysis was indeed there and sleeping at that moment, this study participant also uses the epistemic system in a dishonest way, not to reflect reality but for his own benefit, thereby convincing his boss that he was not there at that moment. Therefore, this suffix-verb tense combination is being used to assist in the creation of the false impression.

4.4.4. Information from a trusted person

In a different Role Play situation, speakers were asked to play the role of a boy or girl who was told by his/her mother or father that his/her grandfather won one thousand soles in the lottery. The next day, the boy/girl wants to tell his/her friend about this good news. Two study participants responded in the following ways:

(8) Hatun papa-y-**mi** qolqe-ta gana-ku-n waranqa-ta gana-**ra-**n.
big father-1-**mi** money-ACC win-REFL-3 thousand-ACC win-**rqa**-3
'My grandfather won money won a thousand.'

(9) Abuelo-cha-y-**mi** qayni unchay huq loteria-pi gana-**ra-**n mil soles-ta.
grandfather-DIM-1-**mi** past day a lottery-LOC win-**rqa**-3 thousand soles-ACC
'Yesterday, my dear grandfather won a thousand soles in a lottery.'

In both (8) and (9), we find the *-mi/-n* + *-rqa-* suffix-verb tense combination. Above, the total population was found to use this combination when information had been obtained from a trusted person about an event. Therefore, these examples support such a criterion for the use of this combination, as the boy or girl in this situation obtained the information from a parent, who is likely to be a trusted person for this boy/girl.

In response to this same situation, two other speakers responded in the following way:

(10) Huh p'unchay, abuelu-cha-y loteria-ta horqo-ru-**sqa**.
one day grandfather-DIM-1 lottery-ACC take-HORT-**sqa**
'One day, my dear grandfather took/won the lottery.'

(11) Papa-y-**mi** gana-ra-mu-**sqa** loteria-pi mil soles-ta.
father-1-**mi** win-HORT-CIS-**sqa** lottery-LOC thousand soles-ACC
'My father won a thousand soles in the lottery.'

In (10), the speaker uses the Ø + *-sqa-* suffix-verb tense combination and in (11), the speaker uses the *-mi/-n* + *-sqa-* suffix-verb tense combination. The findings for the total population from the Subjective Reaction test reveal that the total population claims to use these combinations when Far Psychological Distance may apply. Therefore, here, perhaps the surprising nature of

the event is seen by these study participants as primary and most necessary to communicate. The presence of the hortative infix, *-ru*, in both examples, which indicates suddenness, supports this interpretation.

4.4.5. Widespread knowledge

Three other Role Play situations were created with the aim of presenting the study participants with real-life information assumed to be widespread, common knowledge among all Peruvians. I argue here, based on the choices of the study participants' epistemic suffix-verb tense combinations, that this assumption was false. In the first of these three situations, participants were asked to play the role of a boy or girl who read in a history book that the Spaniards trapped Atahuallpa. The next day, the child's father asks him/her what the Spaniards did. Two study participants responded in the following ways:

(12) Atahuallpa-ta kaptura-**ra-**nku Cajamarca-pi.
Atahuallpa-ACC capture-**rqa**-3PL Cajamarca-LOC
'They captured Atahuallpa in Cajamarca.'

(13) Tawa kaballu-wan sipi-**ra-**nku, sipi-y-ta-**n** muna-**ra-**nku.
four horse-INSTR kill-**rqa**-3PL kill-INF-ACC-**mi** want-**rqa**-3PL
'They killed him with four horses, they wanted to kill him.'

In both (12) and (13), the study participants reveal that they had already learned of the murder of the Inca Atahuallpa by responding to my question with added information. In this situation, study participants were told only that the boy or girl whose role they were playing had read that the Spaniards had trapped Atahuallpa. Nothing was told to these study participants about where the murder took place (in Cajamarca) or how the murder was carried out (with four horses). Therefore, it is obvious that the study participants applied their background knowledge in fashioning their responses to the Role Play situations. In (12), this participant uses the Ø + *-rqa-*

suffix-verb tense combination. The total population was found to use this combination when Close Spatial Distance and Close Psychological Distance apply. As this event happened in Peru and was already known to the speaker, both of these factors may apply. In (13), the study participant uses the *-mi/-n* + *-rqa-* suffix-verb tense combination. The total population claimed to use this combination when information was gathered from a trusted person or when there was high certainty. It is likely that this study participant learned this information in school, from a teacher or from a book. It is also likely that this study participant would consider a teacher to be a trusted person. Having obtained this information from a trusted person, this participant may maintain high certainty as to the truth-value of the information. Therefore, the use of the epistemic system in these examples also falls in line with the findings of the Subjective Reaction test.

In the second of the 'widespread knowledge' Role Play situations, participants were asked to play the role of a boy or girl who heard on the radio that there had been a terrorist attack in the United States against the Twin Towers. The following day, the child's father asks the child what he/she heard on the radio. Two study participants responded in the following way:

(14) Estados Unidus-pi-**s** terrorista-kuna sipi-ra-pu-**sqa** soldado-kuna-ta.
states united-LOC-**si** terrorist-PL kill-HORT-BEN-**sqa** soldier-PL-ACC
'In the United States, the terrorists killed the soldiers.'

(15) Noqa uyari-ni Estados Unidos-pi-**s** pasa-**sqa** huq accidente pasa-mu-**sqa**
I hear-1 states united-LOC-**si** happen-**sqa** a accident happen-CIS-**sqa**

television-pi kay-lla-ta riku-ni.
television-LOC this-LIM-ACC see-1
'I heard in the United States happened, an accident happened, I saw only this on TV.'

In both (14) and (15), these study participants use the *-si/-s* + *-sqa-* suffix-verb tense combination. In (14), there is incorrect uptake of the information. Although this participant was told that there was a terrorist attack in the United States against the Twin Towers, this participant

plays the role of a boy who reports to his father, 'In the United States, the terrorists killed the soldiers'. I argue that the incorrect uptake of this information indicates that this study participant was unfamiliar with the information of this situation. If this study participant had already learned of this fact, I argue, he would have had no problem accessing this information in his memory and using it to fashion an appropriate response to this situation. Therefore, although this study participant is playing the role of a boy who has heard this information on the radio, his own unfamiliarity with the topic colors his response.

In (15), the speaker reports having gathered this information from watching television, although the boy in the situation was described as hearing the information on the radio. Nevertheless, the study participant in (15) also uses the *-si/-s* + *-sqa-* suffix-verb tense combination. Although I present no clear findings above for the total population regarding the Psychological Distance factor for the *-si/-s* + *-sqa-* suffix-verb tense combination, I conclude that this combination may represent Far Psychological Distance, based on the evidence that the total population clearly defined Far Psychological Distance as characteristic of the other two *-sqa-* combinations (Ø + *-sqa-* and *-mi/-n* + *-sqa-*). Furthermore, Gómez was found to define Far Psychological Distance as characteristic of the *-si/-s* + *-sqa-* suffix-verb tense combination. Gómez also listed Far Spatial Distance as characteristic of this combination. Since this event occurred in the United States, it is possible that these Peruvian study participants would also consider the event to have happened at a Far Spatial Distance.

In response to this same situation, yet another study participant answered in the following way:

(16) Huq noticia-ta uyari-ni que Estados Unidus-pi-**n**, terrorista-kuna
A news-ACC hear-1 that states united-LOC-**mi** terrorist-PL

bombarea-**sqa**-ku torre-kuna-ta.
bomb-**sqa**-PL tower-PL-ACC
'I heard news that in the United States, terrorists bombed the towers.'

In (16), it is interesting to note that this participant uses the *-mi/-n* + *-sqa-* suffix-verb tense combination. The findings for the total population reveal that speakers claimed to use this combination when they have had direct sensory evidence in the form of sight and when Far Psychological Distance may apply. As the boy/girl in this situation heard the news on the radio, no mention is made of the boy/girl having seen the event in any form. However, the study partipant who produced this response may have seen the news on television, in recorded action, or in the newspaper, in photos. Therefore, this response may not be strictly what would be produced by the character in the situation. Far Psychological Distance may apply if this participant is playing the role of someone for whom this news was unexpected.

In the third of the 'widespread knowledge' Role Play situations, participants were asked to play the role of a boy or girl who saw on television that a mall in Lima, Peru, called *Mesa Redonda*, was burning up in flames. Later, his/her father asks the child what he/she saw on television. Two study participants responded in the following manner:

(17) Mesa Redonda-pi askha runa-kuna incendio-pi wañu-pu-**sqa**-ku.
Mesa Redonda-LOC many people-PL fire-LOC die-BEN-**sqa**-PL
'Many people died in the fire at Mesa Redonda.'

(18) Television-pi riku-ni haqay Lima llaqta-pi-**n** nina rupha-ra-pu-**sqa**
television-LOC see-1 that Lima city-LOC-**mi** fire burn-HORT-BEN-**sqa**

vende-kuna-ta.
sell-PL-ACC
'I saw on TV that the fire burned the goods/merchants in Lima.'

Far Psychological Distance may apply for both combinations used in (17) and (18): Ø + *-sqa-* and *-mi/-n* + *-sqa-* respectively. In both (17) and (18), therefore, these participants may be

indicating surprise or the unexpectedness of the event. Also, in (18), this participant may be indicating that this information was gathered through sight (on the television). This interpretation is supported in (18) by the fact that this participant mentions he saw this on television and that the hortative, *-ru* is used.

In response to the same situation, another participant replies:

(19) Noqa riku-ni television-pi chay Mesa Redonda ni-sqa suntur-cha-sqa
I see-1 television-LOC that Mesa Redonda say-PP round-DIM-PP

lugar-**mi** rupha-ya-pu-sha-**rqa-**n nina-wan.
Place-**mi** burn-INT-BEN-PROG-**rqa**-3 fire-INSTR
'I saw on television that the round place they call Mesa Redonda was burning up in flames.'

In (19), this participant, using the *-mi/-n* + *-rqa-* combination, may be making reference to the fact that this information was gathered through sight and that this speaker has a high level of certainty. Use of this combination was found to indicate these characteristics.

4.4.6. Dreams

Finally, in another Role Play situation, participants were asked to play the role of a speaker who dreamt that a cow was flying in the sky. The following day, the speaker wants to tell his father about the dream. Three participants responded in the following manner:

(20) Waka seqa-sha-**sqa** altun-**mi**.
cow ascend-PROG-**sqa** high-**mi**
'The cow was ascending high.'

(21) Mosqho-ku-ni huq waka vola-sha-**sqa** altun-ta-**n**.
dream-REFL-1 a cow fly-PROG-**sqa** high-ACC-**mi**
'I dreamt a cow was flying to the sky.'

(22) Waka-ta riku-sha-**sqa**. Sueño ka-sha-**sqa**.
cow-ACC see-PROG-**sqa** dream be-PROG-**sqa**
'I was seeing a cow. It was a dream.'

In both (20) and (21), we find the *-mi/-n* + *-sqa-* suffix-verb tense combination. In (22), we find the Ø + *-sqa-* combination. As found above, the *-mi/-n* + *-sqa-* combination may be used in those situations in which the speaker has seen and maintains a Far Psychological Distance. In (20) and (21), the speaker has 'seen' the cow in his dream. Perhaps because the speaker is talking about a dream, it may only be possible to maintain a Far Psychological Distance. In (22), the speaker uses the Ø + *-sqa-* combination to communicate a Far Psychological Distance.

4.5. Spontaneous Conversation

As mentioned above, during my 2003 field season, in order to gather naturalistic data to further support my claims, I conducted informal recorded interviews and recorded some spontaneous conversations among my participants in both Spanish and Quechua. Here, I present examples from two informal conversations in Quechua. The conversational participants of the first informal conversation are the author and two young inhabitants of CAITH. I precede the speech of the two young girls with 'S:' and 'D:'. 'S' and 'D' are not the first initials of these two girls. The second conversation is between the author, 'M', and two inhabitants of the CdC. In this second conversation, I present examples spoken by only one of these CdC inhabitants, who I will refer to as 'G'. 'G' is not the first initial of this CdC participant.

During the conversation with the CAITH girls, I found the following exchange:

(23) S: Qayna unchay, ima-ta ruwa-**ra**-nki?
past day what-ACC do-**rqa**-2
'What did you do yesterday?'

(24) D: Noqa waqa-yu-sha-**ra**-ni.
I cry-INT-PROG-**rqa**-1
'I cried a lot.'

We may observe that both 'S's' question and 'D's' response contain the Ø + *-rqa-* suffix-verb tense combination. As 'S' would expect for 'D' to have been an agent in her activities of the preceding day, this use falls in line with the findings described above. 'S' and 'D' continued to discuss their activities of the previous day by using verbs such as the following:

(25) uyari-**ra-**ni
listen-**rqa**-1
'I listened.'

(26) pinta-ku-**ra-**ni
paint-REFL-**rqa**-1
'I painted.'

(27) dibuja-**ra-**nchis
draw-**rqa**-1PL.INCL
'We drew.'

(28) qelqa-yu-**ra-**ni
draw-INT-**rqa**-1
'I drew a lot.'

In examples (25), (26), (27), and (28), the speakers were agents of the actions in question.

Below, 'D' reminds 'S' of an experience they both shared the previous year:

(29) D: Qayna wata ri-**ra-**yku, chay-manta huq chinka-ru-ku-**sqa**
past year go-**rqa**-1PL.EXCL that-ABL one get lost-HORT-REFL-**sqa**

wathiya-ta ruwa-sha-qti-yki
wathiya-ACC do-PROG-SEQ-2
'We went last year, and then one got lost while you were making the wathiya.'

In (29), we find both the Ø + *-rqa-* and Ø + *-sqa-* suffix-verb tense combinations. First, 'D' uses Ø + *-rqa-* while stating, "We went last year". In line with the results above for Ø + *-rqa-*, 'D' may use this combination, as she was an agent in the activity. Then, 'D' uses Ø + *-sqa-*, as she continues to say that "one got lost while you were making the wathiya". The combination, Ø + *-sqa-*, was found to be used in situations in which the speaker maintains Far Psychological Distance. Here, the fact that one of their party got lost is revealed as a surprising or unexpected

event. As getting lost is generally unexpected and as the hortative, *-ru* appears marked on the verb, this interpretation is supported.

During my conversation with the two CdC inhabitants, 'G' and I had the following exchange:

(30) M: Ima-ta-**n** ruwa-**rqa**-nki kunan p'unchay, tuta-manta-pi?
what-ACC-**mi** do-**rqa**-2 now day morning-ABL-LOC
'What did you do this morning?'

(31) G: Noqa-taq ichaqa, trabajo-y-pi tarea completa-na-y-ta
I-CONTR however, work-1-LOC homework complete-NMLZ-1-ACC

completa-mu-sha-**ra**-ni. Tuku-pa-mu-sha-**ra**-ni.
complete-CIS-PROG-**rqa**-1 finish-BEN-CIS-PROG-**rqa**-1
'And I, however, at my work, had to complete my homework. I was finishing it.'

In this example, I ask my question using the *-mi/-n* + *-rqa-* combination and 'G' responds, using the Ø + *-rqa-* combination. 'G's' use of Ø + *-rqa-* is consistent with the findings presented above for this combination, as 'G' is describing actions in which he was the agent.

Continuing on the topic of what my interlocutors did the previous day, below, I present another exchange between myself and 'G':

(32) M: Chay-manta, Sacsayhuaman-man-chu ri-**rqa**-nkichis Inti Raymi-paq?
that-ABL Sacsayhuaman-ILLA-INTR go-**rqa**-2PL Inti Raymi-DAT
'So, did you go to Sacsayhuaman for Inti Raymi?'

(33) G: Ri-yku-**n**, arí. Askha runa-kuna ka-**sqa**.
go-1PL.EXCL yes a lot person-PL be-**sqa**
'We went, yes. A lot of people were there.'

In (33), 'G' uses an expression containing *-mi/-n*, followed by an expression containing the Ø + *-sqa-* combination. Since Ø + *-sqa-* has been found to be used when Far Psychological Distance applies, it is possible to conclude that the fact that a lot of people were at Sacsayhuaman for the Inti Raymi sun-worshipping ceremony and celebration was viewed by 'G' as somewhat

surprising. Perhaps seeing a very large crowd anywhere may be considered as always out of the ordinary and somewhat unexpected.

'G' goes on to describe the scene at Inti Raymi in the following way:

(34) G: Puri-nku, uyari-nku, hoq lado-kuna-manta runa-kuna hamu-q-pas
walk-3PL listen-3PL other place-PL-ABL people-PL come-AG-ADD

chay-pi ka-sha-**ra**-nku Inti Tayta-ta qhawa-ri-spa.
that-LOC be-PROG-**rqa**-3PL sun god-ACC look-INC-GER
'They walk, they listen, people coming from other places were also there, looking toward the sun god.'

In (34), 'G' uses the Ø + *-rqa-* combination, as he directly participated in the event under discussion and gathered this information through direct sensory evidence in the form of sight, in line with the findings presented above.

Below, I present another exchange between myself and 'G':

(35) M: Macchu Pichu-man ri-**rqa**-ni, huq khumpa-y-wan.
Macchu Pichu-ILLA go-**rqa**-1 a friend-1-INSTR
'I went to Macchu Pichu with a friend of mine.'

(36) G: Riki, allin-**mi**. Allin-chu ka-**sqa**?
Of course good-**mi** good-INTR be-**sqa**
'Of course, that's good. Was it great?'

In (35), I am telling 'G' about how excited I was to go to Macchu Pichu for the first time a few years ago. Then, in (36), 'G' first responds with an expression containing *-mi/-n*, followed by a question containing the Ø + *-sqa-* combination. It so happens that 'G' had not been to Macchu Pichu before our exchange above in (35) and (36). Therefore, his use of *-sqa-* may indicate his unfamiliarity with Macchu Pichu or Far Psychological Distance regarding Macchu Pichu.

However, I also find an alternate interpretation for 'G's response in (36). 'G' may have questioned me using the Ø + *-sqa-* combination because he recognized that I had not been to Macchu Pichu before that first time and that the experience was new for me at that time. Assuming that I would not have been able to anticipate exactly how Macchu Pichu would be, it

is possible that his use of Ø + *-sqa-* indicates Far Psychological Distance on the part of the Hearer, me. Therefore, rather than indicating only the Speaker's Psychological Distance, it is possible that the assumed Psychological Distance of the Hearer may also be communicated through the use of the epistemic system.

Finally, below, I present another exchange between myself and 'G'. Here, 'G' and I are discussing the time that he prepared stuffed peppers for some tourists hiking the Inca Trail:

(37) M: Chay rocoto-q uhu-n-pi, ima-**n**?
that pepper-GEN inside-3-LOC what-**mi**
'What was inside that pepper?'

(38) G: Relleno verduras-pi ka-**sqa**, habas, zanahoria chay-**mi**.
filling vegetables-LOC be-**sqa** fava beans carrots that-**mi**
'In the vegetables' filling were fava beans, carrots, that's all.'

In (38), 'G' uses the *-mi/-n* + *-sqa-* combination. Above, in the results of the Subjective Reaction Test, this combination was found to indicate that the speaker saw and was surprised, or direct sensory evidence in the form of sight and Far Psychological Distance. As 'G' prepared the stuffed peppers, he was an agent and saw the peppers. As in the case of (36) above, I find Far Psychological Distance to apply as the Hearer, me, was not familiar with the contents of the filling. It was logical for 'G' to assume that I was unfamiliar with the contents of the filling of the stuffed peppers, as I asked him what they were.

4.6. Summary of the findings for Research Goal 1

In summary, I have presented results gathered through a number of different methods. Examination of study participants' ranking of sentences for certainty in the first section of the Subjective Reaction test revealed that the six possible suffix-verb tense combinations were

ordered by the participants from highest certainty to lowest certainty level in the following way: (1) Ø + *-rqa-*, (2) *-mi/-n* + *-rqa-*, (3) *-si/-s* + *-sqa-*, (4) Ø + *-sqa-*, (5) *-mi/-n* + *-sqa-*, and (6) *-si/-s* + *-sqa-*.

The results obtained from my key informant, Gómez, from Vásquez of the CdC, and from the second section of the Subjective Reaction test carried out with participants from CAITH and from the CdC revealed that the five SPEAK discourse factors and three 'Distance' factors were perceived by study participants as influencing their use of the Cuzco Quechua epistemic system.

Furthermore, it was found that generally, the six suffix-verb tense combinations, ordered (1) through (6), may represent various continua, including from higher certainty to lower certainty levels, more trustworthy to less trustworthy sources of information, more Speaker participation to less Speaker participation, and Closer to Farther Temporal, Spatial, and Psychological Distances.

Finally, examples taken from the responses of the study participants to the situations presented to them in the Role Play instrument as well as examples taken from spontaneous/informal conversations in Quechua supported the findings of the Subjective Reaction Test.

4.7. Discussion

Throughout this section, I will compare my findings to other cross-linguistic findings for the semantics and pragmatics of epistemic systems and apply the language of Discourse Analysis to my results. Like Weber (1986) and Faller (2002), I find the Quechua epistemics to encode meaning beyond information source and level of certainty. However, having identified a variety

of meanings for the Quechua epistemics, as presented above, my work takes a step beyond any that has been carried out to date on the semantics and pragmatics of the Quechua epistemics.

As Mithun (1986) found in the case of the Northern Iroquoian epistemic system, I have found Quechua epistemics to simultaneously indicate multiple meanings and to be used for a variety of pragmatic functions, varying with the context. For example, in line with the finding of Du Bois for the cross-linguistic use of epistemics (in Wallace & Chafe, 1986:323), my native Quechua-speaking participants' use of the Quechua epistemic system may have the perlocutionary effect of persuasion, involving changing the state of mind of the hearer. Also, as Hill and Irvine have found cross-linguistically (1993:3), the Quechua epistemics "function in the manipulation of responsibility for knowledge". In other words, my participants use the Quechua epistemics in order to claim, diffuse, or evade responsibility for an utterance.

As the Quechua epistemics may convey multiple meanings, they may be used to perform more than one speech act at a time. Also, as use of the Quechua epistemics is affected by the discourse context, the Quechua epistemics may function as 'contextualization cues'. As described above, 'contextualization cues' "…relate what is said to the contextual knowledge…" (Schiffrin, 1994:99).

As I have found that the various SPEAK and/or 'Distance' discourse factors must apply, with either multiple factors applying simultaneously or single factors applying in isolation, in order for Quechua speakers' utterances containing the various epistemic suffix-verb tense combinations to be successful performances of speech acts, we may describe the SPEAK and 'Distance' discourse factors as sets of possible 'felicity conditions' that must hold. I argue that those Quechua speakers who have communicative competence in Quechua have a knowledge of

the SPEAK and 'Distance' discourse factors and represent the appropriate contextual circumstances during their performance of speech acts by using the Quechua epistemics.

As I have found the Quechua epistemics to indicate multiple meanings, Quechua may rival Kashaya, which was claimed by Oswalt (in Wallace & Chafe, 1986:29) to be one of the "most elaborated and discriminating" epistemic systems of any in the world. I may apply my SPEAK and Distance discourse factors to the epistemic meanings in Kashaya, as found by Oswalt (1986). According to Oswalt, the Kashaya epistemics may indicate that a speaker has perceived an event directly or acquired knowledge through hearsay (my 'Witness/Nonwitness' category within my 'S' discourse factor for 'Source of information'), that a speaker has heard the sound of an action but did not see it (my 'Sensory evidence' category within my 'S' discourse factor for 'Source of information'), that a speaker has performed the action under discussion (my 'Agency' category within my 'P' discourse factor for 'Participation'), that a speaker recognizes the topic under discussion as common knowledge (my 'Collective/widespread knowledge' category within my 'A' discourse factor for 'Attitude toward the truth-value'), that a speaker has observed the action or state under discussion enough to generalize it as true, (my 'Probability' category within my 'A' discourse factor for 'Attitude toward the truth-value'), that a speaker has made an inference based on circumstances or evidence found apart in space or time from the actual event or state or has experienced something in the remote past, (my Far Spatial, Temporal and Psychological Distance discourse factors), and whether the speaker does not remember the precise type of evidence that was available at the time of the event under discussion.

As in the case of Cayuga (Mithun 1986), Quechua epistemics may be used to hedge precision and certainty. Dwyer (1986) has found the epistemic system of Salar to distinguish direct and indirect information source and to be affected by discourse-pragmatic factors and

explains, “The relationship between the speaker, the topic, and other participants thus mediates the choice of indirectivity marking” (in Wallace & Chafe, 1986:57). These discourse-pragmatic factors that Dwyer has found to affect epistemic marking in Salar may fall under my ‘E’ discourse factor, ‘Effect on speaker(s) and hearer(s)’ and my ‘K’ discourse factor, ‘Kind of interlocutors involved’. Also, Dwyer has found that in Salar, “The frequency of direct forms may be correlated with gender. Female speakers of Salar tend to use more indirect forms…” (in Wallace & Chafe, 1986:57). In a similar way, I found my participants to perceive use of the *-si/-s* + *-sqa-* suffix/verb-tense combination as being more likely produced by a girl than a boy. A goal of future investigation will be to test this common perception among my participants.

5. Results: Research Goal 2

5.1. Summary of the Issues

As mentioned above, my second research goal is to investigate whether my study participants show evidence of cross-linguistic influence from their first language, Cuzco Quechua, to their second language, Spanish. I examine all types of cross-linguistic influence as well as the specific case of the cross-linguistic influence of the Cuzco Quechua epistemic system.

Disagreement in the child second language acquisition literature regarding the role of the native language and access to Universal Grammar was one motivation for this second research goal. In summary, in the SLA literature, there is debate as to whether children acquiring a second language within the critical period experience cross-linguistic influence from their first language. Since the majority of my study participants are native-Quechua speaking children or adolescents who began to acquire their second language, Spanish, during childhood, finding evidence of cross-linguistic influence in my study participants' speech informs this SLA debate.

Another motivation for the investigation of this second research goal is disagreement in the literature regarding the way in which the Cuzco Quechua epistemic system exerts cross-linguistic influence on Andean Spanish. This debate has been presented above. Here, I take the field a step closer to resolving the disagreement on this issue with the results of my study.

5.2. Investigation and Presentation of Results

I investigated this second research goal through a variety of methods, including transcription of recorded Language Attitude Interviews carried out in Spanish, examination of

Spanish produced by my study participants during the Role Play Investigation, examination of study participants' short narrative responses in Spanish, and examination of recorded spontaneous and informal conversations among my study participants.

As the data gathered through the means of all of the aforementioned techniques is very similar, here, I choose to draw examples from my full transcription of the recorded Language Attitudes Interviews. For the following five reasons, I consider this Language Attitudes data to be naturalistic: (1) participants had already met me and had already completed multiple other interviews with me, thus resulting in familiarity and reduced anxiety between the interviewer and interviewee, (2) although participants were being recorded, these interviews were carried out in an informal manner (including an informal tone and an informal setting), further reducing anxiety, (3) most of the questions of the Language Attitudes Interview were open-ended, thus allowing for participants to speak freely, (4) participants were given the opportunity to say as much or as little in response to each of the questions as they desired, and (5) participants spoke about their feelings and attitudes toward their two languages, a very real and important topic for them.

5.3. Participant Subset Characteristics

Specifically, throughout this chapter, I present examples from the Language Attitudes interviews with 28 CAITH participants and 42 CdC participants, totaling 70 participants. A total of 68 of these 70 participants claim Quechua as their first language. A total of 2 of these participants claim to have acquired Quechua and Spanish simultaneously. These participants range in age from 11 years old to 58 years old.

The age at which these participants began their acquisition of Spanish ranges from age 0 to age 18. A total of 54 of these 70 participants claimed to start their acquisition of Spanish at the age of 13 or younger and a total of 16 participants claimed to start their acquisition of Spanish between the ages of 14 and 18.

These participants arrived in Cuzco for the first time between the ages of 0 and 21 years. Of these, 40 participants arrived in Cuzco for the first time at the age of 13 or younger and 30 participants arrived in Cuzco for the first time between the ages of 14 and 21 years.

5.4. Measuring Cross-Linguistic Influence

In the following three sections, I discuss three methods used to quantify the presence of 31 different Quechua to Spanish cross-linguistic influence features in the speech of the 70 participants with whom Language Attitudes Interviews were carried out, the (1) Total Cross-Linguistic Feature Score, (2) Calque-Weighted Total Cross-Linguistic Feature Score, and (3) Implicational-Weighted Total Cross-Linguistic Feature Score. In later sections, I discuss and provide examples of my participants' use of each of the 31 different cross-linguistic features examined here.

5.4.1. Total Cross-Linguistic Feature Score

After completing detailed transcription of the 70 Language Attitudes Interviews, I noted whether each of the 70 participants possessed 31 different cross-linguistic features, including phonetic, morphological, calque, and syntactic cross-linguistic features. If these cross-linguistic features appeared anywhere in the speech of the participants during their interviews, they received a score of '+1' for each of these features present in their speech. Therefore, it was

possible for participants to receive 'Total Cross-Linguistic Feature' (Total CLF) scores anywhere between '0' and '31'. The Total CLF scores of the 70 participants examined here ranged from 9 to 26. Therefore, the speech of each of these 70 participants was found to contain cross-linguistic influence from Quechua to Spanish, to varying degrees.

5.4.2. Calque-Weighted Total Cross-Linguistic Feature Score

As an alternative to the Total CLF Score, I calculated a 'Calque-Weighted Total Cross-Linguistic Feature Score' (Calque-Weighted Total CLF Score) to measure the cross-linguistic influence in the speech of each of my 70 participants examined closely here. As with the Total CLF Score, with the Calque-Weighted Total CLF Score, it was noted whether each of the 70 participants possessed 31 different cross-linguistic features, including phonetic, morphological, calque, and syntactic cross-linguistic features. However, rather than assigning a score of '+1' for each of the 31 present cross-linguistic features in the speech of my participants, a score of '+1' was assigned for each of the present features, with the exception of the use of calque features, which were each assigned a score of '+2'. Out of the total 31 different cross-linguistic features examined here, 11 were calque features. Therefore, possible Calque-Weighted Total CLF Scores could range anywhere between '0' and '42'. The Calque-Weighted Total CLF Scores of the 70 participants examined closely here range from 12 to 36. Out of the total 11 different calque features, participants evinced as few as 3 and as many as 10 in their speech. Therefore, based on the measure of the Calque-Weighted Total CLF Score, the speech of each of these 70 participants was also found to contain cross-linguistic influence from Quechua to Spanish, to a greater or lesser extent.

Motivation for weighing the 11 calque features more heavily than the other 20 non-calque features comes from the fact that many of the 20 non-calque cross-linguistic features examined here may possibly appear in dialects of Spanish that are not Andean and that have not been influenced by any indigenous language. Susan Berk-Seligson has found many of the 20 non-calque features to be produced by speakers of Spanish varieties that are not in contact with indigenous languages (e.g., peasants in Costa Rica (2004, personal communication)). These 20 non-calque features may appear in non-Andean Spanish dialects due to general simplification processes or natural changes in these other Spanish dialects. Also, many of the 20 non-calque features presented here may possibly appear in the interlanguage of those learning Spanish as a non-native language, regardless of the learners' native language.

I choose to classify each of the 20 non-calque features as a cross-linguistic feature and to count the presence of each of these 20 non-calque features in the Spanish of my participants as contributing to an overall measure of Quechua to Spanish cross-linguistic influence for these participants because, while the occurrence of these 20 non-calque features may not be solely due to Quechua influence, there is some evidence and reasoning to explain the presence of each of these 20 non-calque features in Andean Spanish as resulting from cross-linguistic influence from Quechua. I present this evidence and reasoning throughout later sections in this chapter.

As the presence and use of calques of Quechua expressions realized in Andean Spanish, unlike those of non-calque features, may be explained only as resulting from cross-linguistic influence from Quechua, weighing the presence of the 11 calque cross-linguistic features more heavily could produce a more accurate representation of the level of cross-linguistic influence from Quechua present in the Spanish produced by each of my participants.

5.4.3. Implicational-Weighted Total Cross-Linguistic Feature Score

As yet another alternative to both the Total CLF Score and the Calque-Weighted Total CLF Score, I calculated an 'Implicational-Weighted Total Cross-Linguistic Feature Score' (Implicational-Weighted Total CLF Score) for each of the 70 participants examined closely here. As with both the Total CLF Score and the Calque-Weighted Total CLF Score, with the Implicational-Weighted Total CLF Score, it was noted whether each of the 70 participants possessed 31 different cross-linguistic features, including phonetic, morphological, calque, and syntactic cross-linguistic features. However, rather than assigning scores of '+1' or '+2' for each of the 31 present cross-linguistic features in the speech of my participants, I performed a Guttman procedure, also referred to as 'Implicational scaling' (Hatch and Lazaraton 1991:204-216), to determine different weights for each of the 31 features.

In order to create an 'implicational scale' for the 31 cross-linguistic features, I first counted how many participants used each of the 31 features at least once in their speech. In Figure 7 below, I present a graph, ordering the cross-linguistic features manifested by the fewest number of participants to those manifested by the greatest number of participants.

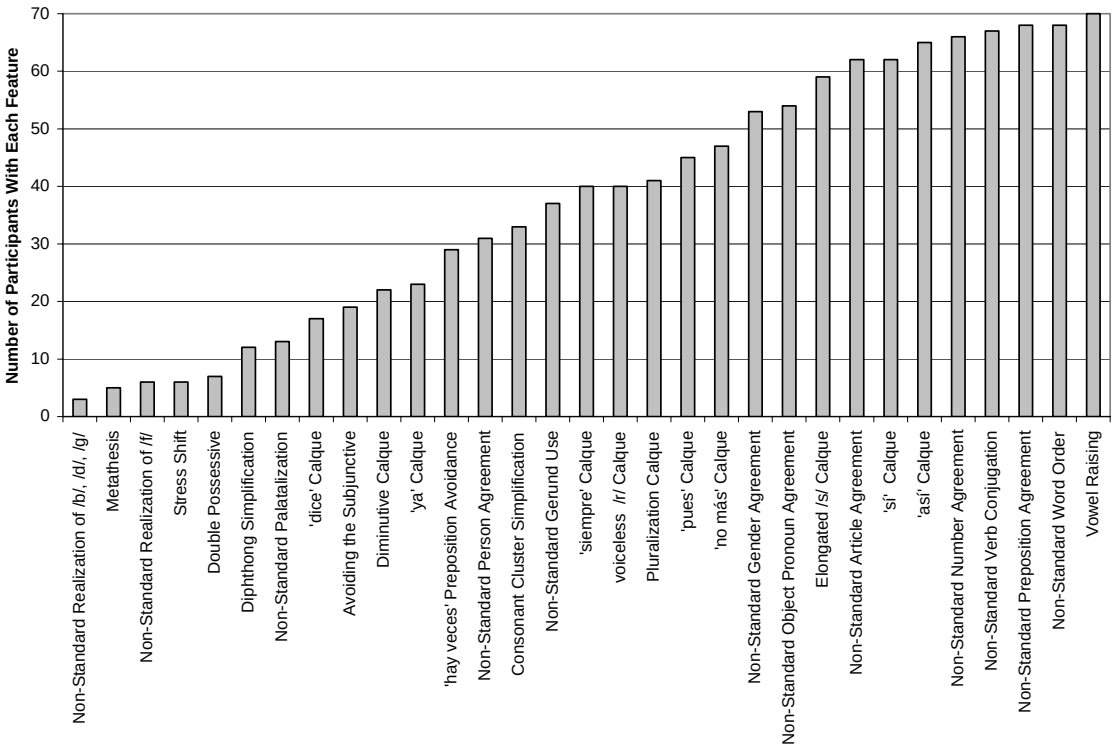


Figure 7. Number of participants out of 70 evincing each of the 31 cross-linguistic features

Already having calculated a Total CLF Score for each of the 70 participants, I then sorted the 70 participants and 31 features by Total CLF Score and by the number of participants with each feature in Table 9 below:

Table 9. Cross-Linguistic Feature Implicational Scale

Participant ID	Non-Standard Realization of /b/, /d/, /g/	Metathesis	Non-Standard Realization of /f/	Stress Shift	Double Possessive	Diphthong Simplification	Non-Standard Palatalization	*'dice'* Calque	Avoiding the Subjunctive	Diminutive Calque	*'ya'* Calque	*'hay veces'* Preposition Avoidance	Non-Standard Person Agreement	Consonant Cluster Simplification	Non-Standard Gerund Use	*'siempre'* Calque	/voiceless /r/ Calque	Pluralization Calque	*'pues'* Calque	*'no más'* Calque	Non-Standard Gender Agreement	Non-Standard Object Pronoun Agreement	Elongated /s/ Calque	Non-Standard Article Agreement	*'si'* Calque	*'así'* Calque	Non-Standard Number Agreement	Non-Standard Verb Conjugation	Non-Standard Preposition Agreement	Non-Standard Word Order	Vowel Raising	SUM
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	1	1	1	1	1	9
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	1	1	1	1	9
005	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	0	1	0	1	1	1	1	0	1	1	11
069	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	1	11
114	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	11
135	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	1	0	1	1	1	1	11
075	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	12
079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	12
146	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	1	0	1	0	1	0	1	1	1	1	1	1	12
164	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	1	0	1	0	0	1	1	1	1	12
066	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	1	13
078	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1	1	1	1	1	13
033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
133	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	1	1	1	1	1	0	1	1	1	1	1	14
136	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	14
168	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	14
172	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	14
112	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	14
032	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	1	1	0	0	1	0	1	1	1	1	0	1	1	1	1	15
073	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	0	0	1	1	15
088	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	15
160	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	1	0	1	1	0	1	1	1	0	1	1	1	1	15
016	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	0	1	1	0	0	1	1	1	1	1	1	0	1	1	15
163	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	15
070	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	16
108	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	16
127	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	16
132	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	16
141	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	16
149	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	16
041	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	16
011	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	17
050	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	17
106	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	17
113	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	17
126	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17
129	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17
137	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	17
138	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17
143	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	17
148	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17
153	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	17
156	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	17
145	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	17
040	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	18
142	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	18
158	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	18
161	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	18
007	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	19
139	0	0	0	0	0	1	0	0	1	0	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
140	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	19
165	0	0	0	1	0	0	1	1	1	0	0	1	0	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	19
173	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
095	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	19
015	1	1	0	0	0	0	0	1	0	0	1	0	1	1	1	0	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	19
125	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
134	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
159	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
166	0	0	0	1	0	0	0	1	0	1	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	20
169	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
128	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
063	0	0	0	0	0	0	1	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
130	0	0	0	0	1	1	0	0	1	0	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	21
060	0	0	1	0	0	1	1	0	0	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
155	0	1	0	0	0	0	0	1	0	1	0	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	21
147	0	0	0	0	1	1	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23
162	0	0	0	0	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	23
154	1	0	0	0	1	0	0	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	23
029	0	1	1	0	1	0	0	1	0	1	1	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	23
111	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	26
SUM:	3	5	6	6	7	12	13	17	19	22	23	29	31	33	37	40	40	41	45	47	53	54	59	62	62	65	66	67	68	68	70	

The right-most column of Table 9 above, the sum column, displays the sums of the total numbers of features evinced by each of the 70 participants. In other words, the sums contained in this right-most sum column are the participants' Total CLF Scores. The sum column along the bottom of Table 9 above displays the sums of the total numbers of participants evincing each of the 31 features. These sums along the bottom of Table 9 are displayed in Figure 7 in graphical form.

We may notice that generally, the lower right-hand section of Table 9 contains mostly '1's, indicating the presence of the features in the speech of the participants, while the upper left-hand portion of the table contains mostly '0's, indicating the absence of the features in the speech of the participants. Upon further examination of Table 9, we may notice that a general diagonal line separates the '1's and '0's, starting from the upper right and progressing toward the lower left.

The thick black line drawn through Table 9 above displays where this diagonal line would fall, were the division between the '1's and '0's to form a perfect idealized matrix. In order to place the thick black diagonal line, following the established guidelines for performing the Guttman procedure, I counted the number of cells equal to the sum in the right-most column from the right to the left side of the Table. For example, the reader will notice that in the first two rows at the top of Table 9, which have sums of '9', the thick black division line falls on the left edges of the ninth cells, counting from the right edge of Table 9 to the left.

As there are many '0's to the right of the idealized diagonal line (212 'errors' to be exact) and as there are many '1's to the left of the thick black diagonal (also 212 'errors'), it is obvious that these data do not form a perfect idealized matrix. In order to determine the level of scalability for this data, it is necessary to calculate a variety of statistics, including the

'coefficient of reproducibility', 'minimum marginal reproducibility', 'percent improvement in reproducibility', and 'coefficient of scalability'. I present my calculations of these statistics, based on the equations presented in Hatch and Lazaraton (1991:210-12), in equations (1), (2), (3), and (4) respectively below.

The 'coefficient of reproducibility' tells us how easily we can predict a participant's performance based on that participant's position in the matrix.

Equation 1. Coefficient of Reproducibility

$$C_{rep} = 1 - \frac{\#\text{errors}}{(\#\text{subjects})(\#\text{items})} = 1 - \frac{212+212}{(70)(31)} = 1 - \frac{424}{2170} = 1 - 0.1954 = 0.8046$$

Based on my 'coefficient of reproducibility' in equation (1), 0.8046, I may conclude that roughly 80% of the time, it is possible to accurately predict which features my participants possess in their speech repertoire based on their position in the matrix. Hatch and Lazaraton explain, "By convention, mathematicians have determined that the value of the coefficient of reproducibility should be over .90 before the scale can be considered 'valid'" (1991:210). Therefore, although being able to predict my participants' performance 80% of the time may seem quite respectable, mathematically, my implicational scale would not be considered to be 'valid'.

"The minimum marginal reproducibility figure tells us how well we could predict the participants' performance without considering the errors (when the participants behave in ways not predicted by the model)" (Hatch and Lazaraton, 1991:211). In order to calculate the 'minimum marginal reproducibility' in equation (2), it was necessary to find the 'maximum marginals' by first finding the total '1's and '0's in each column of Table 9 and then summing the larger of these values (either the number of total '1's or '0's) for all of the columns.

Equation 2. Minimum Marginal Reproducibility

$$MM_{rep} = \frac{\text{maximum marginals}}{(\#\text{subjects})(\#\text{items})} = \frac{1698}{2170} = 0.7825$$

As my 'minimum marginal reproducibility' in equation (2), 0.7825, is less than my 'coefficient of reproducibility', 0.8046, if we do not take the errors into account, it is not possible to reproduce as well a participant's performance based on the participant's position in the matrix. For 'valid' implicational scales, the 'minimum marginal reproducibility' must be less than the 'coefficient of reproducibility'.

The 'percent improvement in reproducibility' shows how much improvement there is between the 'coefficient of reproducibility' and the 'minimum marginal reproducibility'.

Equation 3. Percent Improvement in Reproducibility

$$\% \text{ improvement} = C_{rep} - MM_{rep} = 0.8046 - 0.7825 = 0.0221$$

Therefore, my 'coefficient of reproducibility' improves upon my 'minimum marginal reproducibility' by only approximately 2%.

The 'coefficient of scalability' "…indicates whether a given set of features are truly scalable (and unidimensional)" (Hatch and Lazaraton, 1991:212). I present the general equation and my calculation of the 'coefficient of scalability' in equation (4) below.

Equation 4. Coefficient of Scalability

$$C_{scal} = \frac{\%\text{ improvement}}{1 - MM_{rep}} = \frac{0.0221}{1 - 0.7825} = \frac{0.0221}{0.2175} = 0.1016$$

Therefore, the 'coefficient of scalability' for my data is 0.1016. Hatch and Lazaraton explain, "Statisticians have determined that the coefficient of scalability must be above .60 before we claim scalability" (1991:212). Therefore, as my 'coefficient of scalability', 0.1016, is less than

0.60, I may not 'claim scalability'. In other words, my data do not show a clear scale as my C_{scal} is not large enough for me to feel confident in saying that a scale exists.

While it is true that I may not statistically or mathematically 'claim scalability', based on the appearance of the layout of my data in Table 9, the fact that my 'coefficient of reproducibility', 0.8046, is not tremendously less than 0.90, and the fact that my 'percent improvement in reproducibility' is approximately a positive 2%, I claim that there is an implicational trend in my data, such that participants who manifest a particular feature 'A' will also generally manifest those features ordered to the right of 'A' in Table 9.

As mentioned above, based on the Guttman procedure carried out on my data, I determined different weights for each of the 31 features, which I then summed in order to calculate an 'Implicational-Weighted Total CLF Score' for each of my 70 participants. In order to determine the weight for each feature, I employed equation (5) below.

Equation 5. Implicational Weight for each feature

$$\text{Implicational Weight for each feature} = 100\left(1 - \frac{\text{number of subjects with each feature}}{70}\right)$$

The total number of participants with each feature is presented in the last row of Table 9 above. To demonstrate the use of equation (5), I take the following example. In Table 9, we may observe that three participants manifested alternate realizations of the Spanish phonemes, /b/, /d/, or /g/. A total of three participants represents 4% (0.04) of the total sample of 70 participants. One minus 0.04 is equal to 0.96. For ease of manipulation in my database, I multiply 0.96 by 100, resulting in 96. Therefore, 96 is the implicational-weighted value for the 'alternate realization of /b/, /d/, /g/' feature. In order to find each participant's 'Implicational-Weighted Total CLF Score', I simply added the values for each of the implicational-weighted

features together for those features manifested by each participant. Possible Implicational-Weighted Total CLF scores could range from '0' to '1430'. The Implicational-Weighted Total CLF Scores of my 70 participants range from '108' to '1023'. Therefore, based on the measure of the Implicational-Weighted Total CLF Score, the speech of each of these 70 participants was also found to contain cross-linguistic influence from Quechua to Spanish, to a greater or lesser extent.

5.4.4. Comparison of the Three Measures of Cross-Linguistic Influence

As was the creation of the Calque-Weighted Total CLF Score, the creation of an Implicational-Weighted Total CLF Score was chiefly motivated by the desire to create a representative measure of the Quechua to Spanish cross-linguistic influence present in my participants' speech. Both the Calque-Weighted and Implicational-Weighted Total CLF Scores were conceived of as possible improvements upon the first measure discussed above, the Total CLF Score.

With the Total CLF Score, I count the presence of each of the 31 features equally and for example, treat one participant's score of '9' as equivalent to another participant's score of '9'. A difficulty with this assumption is that participants with Total CLF Scores of '9' may not have evinced identical sets of nine features, as is obvious from examination of Table 9 above. Also, with the Total CLF Score, I assume that a higher Total CLF Score indicates more Quechua influence than does a lower Total CLF Score. The difficulty with this assumption is that it could be possible that the features possessed by a participant with a greater overall number of features may actually indicate less Quechua influence than the features possessed by a participant with a fewer overall number of features.

As explained above, with the Calque-Weighted Total CLF Score, I hypothesize that the calque features may indicate a greater level of Quechua influence and so distinguish two levels of influence, with a higher level of Quechua influence being indicated by the 11 calques than by the other 20 cross-linguistic features. With the Implicational-Weighted Total CLF Score, I distinguish 31 different levels of Quechua influence, based on a calculation involving the total number of participants who possess each feature (equation (5)).

With the Implicational-Weighted Total CLF Score, as mentioned above, I make the assumption that there is an implicational trend in the data such that participants who manifest a particular feature 'A' will also generally manifest those features ordered to the right of 'A' in Table 9. Another assumption involved with the use of the Implicational-Weighted Total CLF Score is that the features ordered toward the left side of Table 9 may indicate more Quechua influence than those ordered toward the right side of Table 9, as those features ordered toward the left side are more generally possessed by those speakers who possess a repertoire with a greater overall number of features. In other words, if speakers with a larger repertoire of cross-linguistic features present in their Spanish evince a greater degree of Quechua influence in their Spanish and happen to be the ones who generally possess the features ordered toward the left side of Table 9, one might assume that the 31 features may indicate greater to lesser Quechua influence, ordered from left to right in Table 9. However, as I have no way of proving this assumption to be true or false at the present time, making this assumption is problematic.

However, as I do claim that there is a general implicational trend in the data, this fact supports the robustness of the Total CLF Score, the first of the three measures of Quechua influence described above. In response to the problematic assumptions regarding the Total CLF Score described above, I may claim that two participants with equal Total CLF Scores generally

do possess similar sets of features and so may be treated as having similar levels of Quechua influence present in their Spanish. Also, a higher Total CLF Score may indeed indicate more Quechua influence than does a lower Total CLF Score, as generally the higher Total CLF Score will include the features that make up the lower Total CLF Score.

5.4.5. Reliability Analysis

To possibly further support the robustness of the Total CLF Score, a reliability analysis was carried out on the results of the Total CLF Score. Gay and Airasian explain in their work, *Educational Research*, "Reliability is the degree to which a test consistently measures whatever it is measuring" (2003:141). Gay and Airasian state more simply, "…if a test is measuring what it is supposed to be measuring, it will be reliable…" (2003:141). Within the field of Educational Research, it is important to know, for example, whether standardized tests are reliable measures of certain types of knowledge. In this case, I used the Total CLF Score to measure the Quechua to Spanish cross-linguistic influence present in my participants' Spanish speech. Gay and Airasian (2003:141) further explain,

> Reliability is expressed numerically, usually as a *reliability coefficient*, which is obtained by using correlation. A high reliability coefficient indicates high reliability. If a test were perfectly reliable, the reliability coefficient would be 1.00, meaning that students scores perfectly reflected their true status with respect to the variable being measured.

Therefore, if my reliability coefficient were to be 1.00, that would mean that my participants' Total CLF Scores would perfectly reflect the varying levels of Quechua influence in their speech. However, "all test scores have some degree of measurement error", due to such things as variations in participants' health, motivation, anxiety, attitude, and attention change (Gay & Airasian, 2003:141).

Here, a test of 'internal consistency', producing 'Cronbach's alpha', one type of reliability measure, was carried out. Internal consistency measures "the extent to which the items in a test are similar to one another in content" (2003:145). In application to my situation, a measure of internal consistency measures the extent to which each of my 31 features similarly measure Quechua to Spanish cross-linguistic influence. "Internal consistency is a commonly used form of reliability that deals with one test at one time. It is obtained through three different approaches: split-half, Kuder-Richardson, or Cronbach's alpha" (Gay & Airasian, 2003:143). Gay and Airasian further explain, "Kuder-Richardson (KR) and Cronbach's alpha estimate internal consistency reliability by determining how all items on a test relate to all other test items and to the total test. When its items or tasks are measuring similar things, they are internally consistent" (2003:144). Therefore, in this case, the internal consistency of the Total CLF Score was determined by examining how each of the 31 cross-linguistic features relates to each of the other features and to the Total CLF Score. The formula for Cronbach's alpha is the following (Anastasi, 1988:123):

Equation 6. Cronbach's alpha

$$\text{Cronbach's alpha} = r_{tt} = \left(\frac{n}{n-1}\right)\frac{SD_t^2 - \sum(SD_i^2)}{SD_t^2}$$

Here, *n* represents the number of total items (31 features). Also, the numerator of the last expression is equal to the squared standard deviation (variance) of my participants' Total CLF Scores minus the sum of the variances of each of the 31 features. The denominator in the last expression is again the variance of my participants' Total CLF Scores.

Including all of the 31 features, my Cronbach's alpha came to 0.6501. However, upon deleting 3 of the 31 features, Vowel Raising, Stress Shifting, and the Voiceless [r] Calque (all of

which I describe in later sections of this chapter), my Cronbach's alpha improved and came to 0.6753. As I found all of my 70 participants to possess the Vowel Raising feature, this feature did not have any variance. Thus, it makes sense to remove this feature from the calculation. Also, for the Stress Shifting and Voiceless [r] Calque features, the 'corrected item-total correlation' (the correlation of the presence/absence of each of my features for each of my participants with the total number of features present for each participant, or each participant's Total CLF Score), was negative, indicating that there was no relationship between the presence or absence of these two features and the total number of other features each of the 70 participants possessed, or each participants' Total CLF Score.

It is difficult to judge whether my results for Cronbach's alpha, 0.6501 or 0.6753, constitute acceptable levels of reliability. Gay and Airasian explain (2003:145):

> What constitutes an acceptable level of reliability is to some degree determined by the type of test, although very high reliability coefficients would be acceptable for any test. The question really is concerned with what constitutes the minimum level of acceptability. This will differ among test types. For example, standardized achievement and aptitude tests should have high reliability, often higher than 0.90. On the other hand, personality measures do not typically report such high reliabilities…and one would therefore be satisfied with a reliability somewhat lower than expected from an achievement test. Moreover, when tests are developed in new areas, reliability is often low initially.

With this in mind, and based on a personal communication from Elaine Rubinstein, a statistician at the University of Pittsburgh, I conclude that my values for Cronbach's alpha are moderately reliable, at the very least. Therefore, having judged the internal consistency of my Total CLF Score as being moderately reliable, I may conclude that the Total CLF Score is an adequate measure of the Quechua to Spanish influence present in the speech of my 70 participants.

5.4.6. Limitations of the Three Measures of Cross-Linguistic Influence

It is important to note that, while the three measures of Quechua to Spanish cross-linguistic influence presented above, the Total CLF Score, the Calque-Weighted Total CLF

Score, and the Implicational-Weighted Total CLF Score, may be more or less representative of the level of Quechua influence in my participants' Spanish, each of these three measures has the same limitation, namely, that a single instance of each of the 31 features in the speech of the participants is interpreted as indicating cross-linguistic influence. Therefore, in this dissertation, although my participants generally produced the majority of the 31 features numerous times throughout the course of their speech, I do not present the relative prevalence of the 31 features in the Spanish of my 70 participants. In other words, I do not count the frequency of each of the 31 features in the speech of each of my 70 participants but simply count whether the 70 participants evince each of the 31 features at least once. Consequently, I make the assumption that single instances of the 31 features are not simply flukes or mistakes but indicate that the 31 features are present in the Quechua-influenced Spanish grammars of my participants and that these 31 features are manifestations of this Quechua influence.

Often, language contact scholars, including those cited in the Literature Review of this dissertation, such as Zavala (2001), Escobar (2000, 1997), Lee (1997), Lipski (1996), Klee and Ocampo (1995), Odlin (1989), and many others, make no claims regarding the frequencies of cross-linguistic features present in their subjects' speech but instead cite specific examples as indicating the presence of cross-linguistic influence. Michael Clyne (2003:76) defines 'transfer' in the following way: "A 'transfer' is an instance of transference, where the form, feature or construction has been taken over by the speaker from another language, whatever the motives or explanation for this. 'Transference' is thus the process and a 'transfer' the product."

For a variety of reasons, I do not present frequency counts for the 70 participants' use of each of the 31 features. Firstly, I feel that while finding the frequencies might allow me to make stronger claims, this would not be necessary in order to answer the three research questions

proposed in this dissertation. Another reason for not presenting the frequencies here is simply that finding the frequencies of the 70 participants' use of the 31 features would be a very time-consuming task, resulting in 2170 different counts. Also, if I were to find the frequencies, it would still be necessary to establish an arbitrary threshold at which I would claim the occurrence of cross-linguistic influence.

Furthermore, as is often done in variation studies, in order to compare participants' frequencies for using each of the 31 features, as some participants produce more speech than others during a given interview, it would be necessary to take the frequencies as percentages of the total possible environments in which the features could have been produced. While this task is relatively straightforward in the case of phonetic variables, this task is problematic in the case of morphosyntactic and calque features, as it may be difficult or impossible to determine possible environments for the production of such morphosyntactic and calque features. In other words, in the case of morphosyntactic and calque features, it may be difficult to conclude that there are two equivalent methods of communicating the same message (i.e. the definition of a 'variable'). For example, in the case of the calques for the Quechua epistemic suffixes, *-mi* and *-rqa-*, which I will discuss in later sections of this chapter, it would not be possible for me to know with any high degree of certainty when a participant may be describing an event in Spanish for which the participant feels Close Psychological Distance, Close Spatial Distance, or Close Temporal Distance, as these Distance discourse factors are highly subjective. A future goal of research will be to carryout a more in-depth investigation of native Quechua speakers' use of each of the 31 cross-linguistic features presented here.

5.5. Phonological Cross-Linguistic Influence Results

In Table 10 below, I present eight Phonetic Cross-Linguistic Features (Phonetic CLF) found in the speech of the 70 participants examined closely here. Furthermore, in Table 10, I present the total numbers of participants whose speech contained each of the eight features (identical to the data contained in Table 9 above) as well as the percentages that these counts represent out of the total 70 participants.

Table 10. Phonetic Cross-Linguistic Features (Phonetic CLF)

	vowel raising	consonant cluster simplification	palatalization	simplification of diphthongs	alternate realization of /f/	stress shifts	metathesis	alternate realization of /b/, /d/, /g/
Count	70	33	13	12	6	6	5	3
Percent	100%	47.14%	18.57%	17.14%	8.57%	8.57%	7.14%	4.29%

5.5.1. Vowel Raising

In Table 10, we may observe that 100% of the 70 participants examined closely here possessed the 'vowel raising' Phonetic CLF. For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the vowel raising cross-linguistic feature when they were found to raise the Spanish /e/ or /o/ nonstandardly in at least one instance during the course of their speech.

Simplification of the Spanish five-phoneme system to a three-phoneme system, like that of Quechua, may indicate cross-linguistic influence from Quechua. In Table 11 and Table 12 below, I present the Cuzco Quechua and Spanish vowel phoneme inventories respectively.

Table 11. Quechua vowel phonemes

	front	mid	back
high	i		u
low		a	

Table 12. Spanish vowel phonemes

	front	front-mid	mid	back-mid	back
high	i				u
mid		e		o	
low			a		

In Cuzco Quechua, each of the high vowels, /i/ and /u/, has two allophones. The Quechua /i/ phoneme may be realized as a front, high-mid vowel (as in the English word, 'bit') in word-final position and as a front-mid, mid-low vowel (as in the English word, 'bet') when occurring in the vicinity of uvular consonants (Cusihuaman, 2001:276). The Quechua /u/ phoneme may be realized as a back, high-mid vowel (as in the English word, 'put') in word-final position and as a back-mid, mid-low vowel (as in the English word, 'bought') when occurring in the vicinity of uvular consonants (Cusihuaman, 2001:276).

The only phonetic instrument used here to measure the relative height and frontness/backness of the vowels produced by the participants in Spanish was my ear. It will be a goal of future research to measure these vowels with technological precision. Although lacking in technological precision, relying on my trained ear, I argue that these participants raise the Spanish /e/ and /o/ to vowel positions located on a continuum between the high and high-mid positions. My participants raised the Spanish /e/ and /o/ most often in the word-final position. These participants were also found to raise the Spanish /e/ and /o/ often within the last syllables of words in Spanish, especially preceding a morpheme boundary. As /o/ occurs word-finally in Spanish more often than does /e/, I found raising of the Spanish /o/ to [u] word-finally to be the most common vowel-raising process among my study participants. I conclude that this higher

occurrence of vowel raising toward the ends of words in Spanish is possible evidence of cross-linguistic influence from Quechua. As the allophones of the Quechua phonemes, /i/ and /u/, are the high-mid vowels in word-final position in Quechua, these study participants are more likely to produce these same allophones word-finally or within the final syllables of words while speaking Spanish.

Furthermore, I argue that these participants raise the Spanish /e/ and /o/ to positions on a continuum between high and high-mid rather than simply to the high-mid position, as would be produced in Quechua and therefore an instance of direct transfer, because they are making a compromise between the impetus to exhibit cross-linguistic influence from Quechua and the opposing force of maintaining the phonemic and allophonic contrasts of Spanish phonology.

As the Spanish consonant phonemic inventory does not include uvular consonants, I argue that native Quechua speakers have no motivation to produce their mid-low allophones (as in the English 'bet' and 'bought') while speaking in Spanish. In other words, there is no parallel environment for the production of these allophones in Spanish.

In Table 13 below, I present examples of words containing raised vowels, produced by my participants in Spanish. Although the raised vowels in the examples below represent a continuum between the high and high-mid positions, I choose to simply write them using the symbols for the vowels in the high position, '[i]' and '[u]'. Also below, I write the Spanish words, followed by the phonetic realizations of the words by my study participants, followed by the meanings of the words in English.

Table 13. Examples of vowel raising

	Word-final position	Within the final syllable	Other positions
raised /o/	*radio* [radiu] 'radio'	*estoy* [estuy] 'I am'	*orgulloso* [urgullosu] 'proud'
	creo [kreu] 'I think'	*estamos* [estamus] 'we are'	*porque* [purke] 'because'
	campo [kampu] 'countryside'	*son* [sun] 'they are'	*bonito* [bunito] 'beautiful'
	cuando [kwandu] 'when'	*ellos* [ellus] 'they'	*solicitar* [sulisitar] 'to solicit'
	castellano [kastillanu] 'Castillian'	*tios* [tius] 'uncles'	*Santa Mónica* [santa munika] 'Saint Monica'
	claro [claru] 'of course'	*muchos* [muchus] 'many'	*negociante* [negusiante] 'business person'
	orgulloso [orgullusu] 'proud'	*amigos* [amigus]	*conozco* [konusko] 'I know'
	limeño [limeñu] 'from Lima'	*campesinos* [kampesinus] 'peasants'	*entonces* [entunses] 'so'
	mucho [muchu] 'a lot'	*significados* [signifikadus] 'meanings'	*importante* [impurtante] 'important'
	algo [algu] 'something'	*mestizos* [mestisus] 'of mixed Spanish and indigenous blood'	*idioma* [idiuma] 'language'
raised /e/	*de* [di] 'of'	*en* [in] 'in'	*enseño* [insiñu] 'I teach'
	seguramente [siguraminti] 'surely'	*inglés* [inglis] 'English'	*hermoso* [irmosu] 'beautiful'
	importante [importanti] 'important'	*saber* [saβir] 'to know'	*quechuista* [kichuista] 'pro-Quechua'
	parte [parti] 'part'	*siguen* [sigin] 'they follow'	*mecánico* [mikaniko] 'mechanic'
	este [esti] 'um'	*producen* [produsin] 'they produce'	*desconocidos* [diskonosidos] 'strangers'
	dice [disi] 'he says'	*saben* [saβin] 'they know'	*pensando* [pinsando] 'thinking'
	identificarse [identifikarsi] 'to identify oneself'	*comprenden* [comprendin] 'they understand'	*seguir* [sigir] 'to follow'
	se [si] 'themselves'	*conocen* [konosin] 'they know'	*necesario* [nisisario] 'necessary'
	siempre [siempri] 'always'	*vienen* [bienin] 'they come'	*aspectos* [aspiktus] 'aspects'
	que [ki] 'that'	*dicen* [disin] 'they say'	*enseñar* [ensiñar] 'to teach'

Upon examination of the 'Word-final position' column in Table 13 above, we may notice that vowels may be raised by these participants word-finally, following both vowels and consonants. Within the larger data set, vowels were found to be raised by participants following both voiced and voiceless consonants of every place and manner of articulation.

Upon examination of the 'Within the final syllable' column above, we find that the vowels raised within final syllables often occur preceding a morpheme boundary. For instance, in the example '[amigus]', the Spanish /o/ is raised to [u] at the end of the morpheme *amigo*, 'friend'. The '-s' following *amigo* indicates plurality. Therefore, in this example, the [u] occurs

morpheme-finally, preceding the plurality morpheme. In a similar fashion, in the example, '[saβin]', this participant's realization of the Spanish *saben*, 'they know', the Spanish /e/ is raised to [i] preceding the 3rd person plural morpheme, '-n'.

Finally, in the 'Other positions' column above, we may observe that vowels may be raised word-initially and word-medially as well as word-finally. As mentioned above, vowel raises in positions other than word-finally and within the last syllable were less frequent.

5.5.2. Consonant Cluster Simplification

After vowel-raising, consonant cluster simplification was the next most prevalent Phonetic CLF, with 33 of the 70 participants (47.14%) simplifying at least one consonant cluster in their speech. According to Madeleine Zúñiga, in her work *La educación bilingüe y la enseñanza de pronunciación castellana a niños quechua-hablantes* (1974:97-9), consonant clusters do not natively occur within a single syllable in Quechua. Such homosyllabic consonant clusters may occur only in Quechua in Spanish loans. Quechua only natively allows consonant clusters to occur word-medially and across a syllable boundary. According to Zúñiga (1974:100-1), the Quechua syllable must consist of a vowel nucleus, which may or may not be preceded or followed by a single consonant. Therefore, there are four possible native Quechua syllable types: V, CV, VC, and CVC, with CV being the most frequent. Thus, only a sequence of CVC-CVC may result in native Quechua consonant clusters.

As Quechua does not natively allow homosyllabic consonant clusters and since CV is the most frequent syllable structure in Quechua, I choose to classify all consonant cluster simplification by Quechua speakers in Spanish as resulting from possible cross-linguistic influence from Quechua to Spanish. In Table 14 below, I present examples of consonant cluster

simplification produced by my study participants. It is interesting to note that the vibrant consonant, 'r', is the consonant dropped in 8 of the 11 examples below. Also, in 6 of the 7 homosyllabic examples and in 2 of the 4 ambisyllabic examples, the final consonant of the Spanish consonant cluster is the one that is dropped.

Table 14. Consonant cluster simplification examples

	Spanish	Quechua realization	English
homosyllabic consonant cluster simplification	*siempre*	[siempe]	'always'
	otros	[otos]	'others'
	podría	[podia]	'I would be able to'
	prefiero	[refiero]	'I prefer'
	ejemplo	[ehempo]	'example'
	administrar	[administar]	'administrate'
	piedra	[peda]	'stone'
ambisyllabic consonant cluster simplification	*porque*	[poke]	'because'
	también	[tamien]	'also'
	descubierto	[deskuβieto]	'discovered'
	cursos	[kusus]	'courses'

An alternate method of avoiding the realization of consonant clusters in Spanish among my participants was to insert an epenthetic vowel between the two consonants of a cluster, such as in the example, *especialmente* [espesialamente], 'especially'.

5.5.3. Simplification of Diphthongs

Although palatalization follows the simplification of consonant clusters in terms of the frequency of occurrence among my study participants, I jump here to a discussion of the simplification of diphthongs, as this will clarify my following discussion of palatalization. A total of 12 participants (17.14%) possessed the simplification of diphthongs Phonetic CLF, meaning that they simplified at least one diphthong during the course of their speech. As described above, VV is not a possible native Quechua syllable structure. However, Quechua does allow for vowels preceded or followed by the semiconsonants 'y' and 'w' (Zúñiga,

1974:81-5). Zúñiga (1974:81-5) interprets these semiconsonants as consonants. If we represent the semiconsonants with the symbol, '*C*', then we may describe *C*V and V*C* as possible Quechua syllable structures.

The most common method of simplifying diphthongs among my participants was for them to reduce the diphthong to a single vowel, as in the examples below in Table 15.

Table 15. Simplification of diphthongs examples

Spanish	Quechua realization	English
antiguos	[antigus]	'old'
fuertes	[fertes]	'strong'
siempre	[simpre]	'always'
siempre	[sempre]	'always'
siembran	[sembran]	'they plant'
tiempo	[timpu]	'time'
pierden	[perden]	'they lose'
piedra	[peda]	'stone'

Another method of simplifying a diphthong employed by one of my participants was to reduce the diphthong to a single vowel and add a consonant, as in the example, *quiere*, 'he/she wants', realized as [kedre]. In this example, the [i] is dropped and a [d] is added. Yet another method found among my participants was to replace both vowels of the diphthong with a single, different vowel, as in the example, *encuentras*, 'you find', realized as [enkantas]. Here, both vowels of the diphthong, [ue] are dropped and replaced with [a].

5.5.4. Non-standard Palatalization

After consonant cluster simplification, palatalization was the next most prevalent Phonetic CLF among my participants, with 13 participants (18.57%) producing at least one nonstandard palatalization during the course of their speech. In the examples presented below in Table 16, participants palatalize an [s] occurring before an [i], resulting in the palatal consonant,

[sh], which also happens to be a consonant of Cuzco Quechua. As this palatalization 'swallows' the [i], in the examples below, these participants avoid producing diphthongs, thus maintaining syllable structure in Spanish that is more Quechua-like. Therefore, palatalization is also possible evidence of cross-linguistic influence from Quechua to Spanish.

Table 16. Non-standard palatalization examples

Spanish	Quechua realization	English
siempre	[shempre]	'always'
siete	[shete]	'seven'
cierto	[shertu]	'right'
pronunciarlo	[pronunsharlo]	'to pronounce it'
quisiera	[kishera]	'I would like to'
hicieron	[isheron]	'they made'
tradiciones	[tradishones]	'traditions'
profesiones	[profeshones]	'professions'
comunicación	[komunikashon]	'communication'
noticias	[notishas]	'news'
educación	[edukashon]	'education'
discriminación	[diskriminashon]	'discrimination'
despacio	[despashu]	'slowly'

5.5.5. Metathesis

A presentation of metathesis follows the topics of the simplification of diphthongs and palatalization well. Metathesis was found to occur at least once in the speech of 5 out of 70 participants (7.14%). Metathesis is the reordering of phonemes in an expression. The few examples of metathesis produced by my study participants appear to have a variety of motivations.

In one example, rather than saying the Spanish *dice*, 'he says', one participant produced [desi]. As discussed above, in Quechua, the Quechua phoneme, /i/, is produced as the high-mid allophone in word-final position. Therefore, rather than raise the final [e] of *dice*, this participant reverses the order of the two vowels in order to make the Spanish word end with [i]. Therefore,

in this example, I argue that this participant reversed the positions of the two vowels due to possible cross-linguistic influence from Quechua phonology.

In another example, rather than saying the Spanish *él*, 'he', one participant produced [le]. As 'CV' is the most common syllable structure in Quechua, I argue here that this participant reversed the vowel and the consonant in order to form a CV syllable. Therefore, I argue that this instance of metathesis is also due to possible cross-linguistic influence from Quechua phonology.

In yet another example, rather than saying *poesía*, 'poetry', one participant produced [poiseas]. The Spanish *poesía* has a CVV-CVV syllable structure. The form produced instead by this participant, [poiseas], has a CV*C*-CVVC syllable structure. In order to avoid producing two consecutive syllables that would not conform to the rules of Quechua phonology, this participant reverses the [e] and [i] and transforms the [i] into a semiconsonant, '*C*', thereby changing the first syllable to a possible Quechua syllable structure. With this in mind, I also find this instance of metathesis to be a result of possible cross-linguistic influence from Quechua to Spanish. It is important to note that the phoneme [s] has been placed word-finally in a nonstandard way in the form produced by this participant. In a later section, I discuss the phenomenon of nonstandard pluralization.

5.5.6. Alternate Realizations of Spanish /f/

In Table 17 below, I present an inventory of the Quechua consonant phonemes:

Table 17. Quechua consonant phonemes

	bilabial	dental	alveolar	palatal	velar	post-velar	glottal	
stop	p	t			k			voiceless
aspirated	ph	th		chh	kh			
glottalized	p’	t’		ch’	k’			
fricative			s	sh	h		h	
stop						q		
aspirated						qh		
glottalized						q’		
lateral			l	ll				voiced
nasal	m		n	ñ				
vibrant			r	y				
affricate								

Upon examination of the Quechua consonant phonemic inventory, we may observe that Quechua, unlike Spanish, does not include a voiceless labio-dental fricative, /f/. As mentioned above, investigators have found native Quechua speakers to substitute other sounds for the Spanish /f/ while speaking in Spanish (Mamani & Chávez 2001 :84; Cusihuaman 2001).

In my data, 6 participants, representing 8.57%, produced at least one alternate realization of the Spanish /f/ while speaking in Spanish. The most common method of alternate realization was for participants to produce a voiceless bilabial fricative [Φ], as in the examples below in Table 18.

Table 18. Examples of realization of /f/ as [Φ]

Spanish	Quechua realization	English
futuro	[Φuturu]	‘future’
profesional	[proΦisional]	‘professional’
frutas	[Φrutas]	‘fruits’
confundes	[konΦundes]	‘you confuse’
fuerza	[Φuersa]	‘strength’
forma	[Φorma]	‘form’

Other less common methods of alternate realization were for participants to produce [h], the voiceless glottal fricative, as in the example, *chef*, ‘chef’, realized as [cheh] and to produce the Quechua voiceless aspirated bilabial stop, [ph], as in the example, *fácil*, ‘easy’, realized as

[phasil]. One participant consistently produced the Spanish /f/ as a voiceless labio-dental fricative with lip-rounding, as in the example, *feo*, 'ugly', realized as [f^{w}eu]. As Quechua does not have phonemes in labio-dental position, I interpret these alternate realizations of the Spanish /f/ as possible evidence of cross-linguistic evidence from Quechua to Spanish.

5.5.7. Alternate Realizations of Spanish /b/, /d/, and /g/

Upon further examination of the Quechua consonantal system, presented in Table 17 above, we may note that there are no voiced bilabial, dental, or velar stops. Among my participants, 3, representing 4.29%, produced at least one alternate realization of the Spanish /b/, /d/, or /g/. In Spanish, the voiced bilabial fricative, [β], is an allophone of /b/. Cusihuaman (2001:49-51) has studied this phenomenon. Rather than saying *cuando*, 'when', one of my participants produced [kwantu], thereby simply devoicing the [d]. In another example, rather than saying *habas*, 'fava beans', one participant produced [awas], replacing the [β] with the semiconsonant, [w]. Rather than saying *observar*, 'to observe', another participant produced [okserβar], replacing the first [β] with a voiceless velar stop, [k]. In each of these examples, the voiced stop is replaced with a native Quechua phoneme, thereby indicating possible cross-linguistic influence from Quechua to Spanish.

5.5.8. Stress Shifting

The last Phonetic CLF examined here is stress shifting. A total of 6 participants, representing 8.57%, were found to shift stress nonstandardly while speaking in Spanish. According to Cusihuaman (2001:54), Quechua's word stress system dictates that words are very

regularly stressed on the penultimate syllable. As Quechua's stress system is so regular, there is generally no need to mark stress while writing in Quechua, except on those relatively rare occasions when a Quechua word is stressed on the last syllable, therefore requiring a written stress mark.

In the following two examples, stress is shifted from the first syllable, where it is placed standardly in Spanish, to the penultimate syllable: *jóvenes*, 'young men and women' becomes realized as [hoβEnes] and *música*, 'music', becomes realized as [muSIkas]. In these examples, I am marking the syllable that is realized with the most stress with capital letters. In another similar example, a participant shifted the stress from the second syllable to the penultimate syllable: *estábamos*, 'we were', realized as [estaβAmos].

Another participant produced the Spanish *estudio*, 'study', as [estuDIo]. Here, the stress is already placed on the penultimate syllable in Spanish. The Spanish *estudio* has three syllables, split as *es-tu-dio* and with a structure of VC-CV-CVV. Therefore, we may note that the last syllable of this Spanish word contains a diphthong. The stress shift produced by this participant creates an added syllable. In the realization, [estuDIo], we find four syllables, split as [es-tu-DI-o], with a structure of VC-CV-CV-V. Therefore, shifting the stress in this case allows this participant to produce a word that contains syllables with possible Quechua syllable structures, as diphthongs do not occur natively in Quechua. Therefore, I may conclude that shifting stress, as in the examples presented above, may represent further possible evidence of the cross-linguistic influence of Quechua to Spanish.

5.6. Morphosyntactic and Calque Cross-Linguistic Influence

As mentioned above, beyond the eight Phonetic CLF, it was noted whether participants possessed 12 different morphosyntactic and 11 different calque cross-linguistic features as well. For each participant, the number of total possessed Phonetic CLF, Morphosyntactic CLF, and Calque CLF is equal to each participants' Total CLF Score. Here, I discuss and provide examples for each of the 12 Morphosyntactic CLF and 11 Calque CLF.

5.6.1. Non-standard Agreement

5.6.1.1. Non-standard Number, Gender, and Person Agreement

As mentioned above in the Literature Review, in Chapter 2, Romero (1993:173-177 for Peru), Lipski (1996:214 for Bolivia), and Lee (1997:157-160 for Andean Spanish) all mention a lack of morphological agreement of number and gender as characteristic of the Spanish spoken by Quechua speakers. Romero attributes this lack of agreement to the facts that Quechua does not encode gender grammatically and has only one second person singular pronoun, *qan*, where Spanish has two, one informal, *tú*, and one formal, *usted* (1993:259-60, 325).

It should also be noted that the rules of Quechua pluralization are not identical to the rules of Spanish pluralization. In general, pluralization does not occur as frequently in Quechua as it does in Spanish. According to Aráoz and Salas (1993:62-5), in general in Quechua, the suffix, *-kuna*, may be added onto the ends of nouns and second and third person pronouns in Quechua to pluralize them. However, they explain that there are some exceptions to the use of *-kuna*. For example, in order to form the plural of the first person pronoun, *noqa*, it is necessary to add the suffix, *-nchis* for the inclusive 'we', *noqanchis*, and *-yku* for the exclusive 'we',

noqayku. In Quechua, many abstract words, such as *iñiy*, 'to believe', and *ch'uya*, 'purity', are not pluralized. Therefore, they do not receive *-kuna*. Furthermore, the names of metals, such as *quri*, 'gold', *qulqi*, 'silver', *chuqi*, 'fine gold', *anta*, 'copper', and *titi*, 'lead', are not pluralized. Words preceded by cardinal numbers in Quechua will also not be pluralized. In addition, *-kuna* is not used to form the plural of some celestial bodies and natural phenomena, such as *unu*, 'water', *killa*, 'moon', *inti*, 'sun', *para*, 'rain', and *wayra*, 'wind'. Moreover, nouns that naturally come in pairs are not pluralized in Quechua, such as *ñawi*, 'eyes', *chaki*, 'feet', *ninri*, 'ears', and *maki*, 'hands', unless these are marked with a possessive suffix, as in the example, *ñawiykuna*, 'my eyes' (*ñawi-y-kuna* = 'eye-1st person possessed-plural). Finally, some nouns that are often thought of as belonging to a group of other identical nouns are not pluralized, such as *rumi*, 'rocks', *runa*, 'people', *t'anta*, 'bread', *muhu*, 'seeds', and *uywa*, 'cattle' (Aráoz & Salas (1993:62-5).

Below, in Table 19, I present the total numbers of participants whose speech contained nonstandard number, gender, and person agreement as well as the percentages that these counts represent out of the total 70 participants.

Table 19. Non-standard Number, Gender, and Person Agreement CLF

	Number Agreement	Gender Agreement	Person Agreement
Count	66	53	31
Percent	94.29%	75.71%	44.29%

NON-STANDARD NUMBER AGREEMENT

While speaking in Spanish, participants did not employ standard number agreement in a variety of ways. In example (39) below, this participant does not pluralize *mes*, 'month', following the cardinal number, *siete*, 'seven'. As Quechua does not pluralize nouns following

cardinal numbers, as explained above, this lack of number agreement may be possible evidence of cross-linguistic influence from Quechua.

(39) Viene olvidando, mas de **siete mes** esta, ah hah, así.
come-3-sg. forget-PP more than seven month is-3-sg. ah hah, así.
'He forgot before coming, he's (here) more than seven month.

This participant's use of *viene olvidando*, 'He forgot before coming', is similar to Lipski's (1996:239) finding for bilingual Quechua-Spanish speakers of Ecuador and southern Colombia. Specifically, Lipski has found them to use the combination of the conjugation of the Spanish verb *venir*, 'to come', plus a gerund in the following way: *vine comiendo*, literally 'I came eating', meaning *comí antes de venir*, 'I ate before coming'. In my parsing and English gloss of example (39), I have not translated the Spanish *así*. In a later section, I discuss how I found my participants to use a variety of expressions, including *así*, to indicate epistemic meaning.

In example (40) below, a verb and adjective do not reflect plural number following the cardinal number, *dos*, 'two':

(40) Los **dos es bueno**, sí.
The-masc.-pl. two is-3-sg. good-masc.-sg. sí.
'The two (of them) is good.'

In example (41) below, *toda*, 'all' is lacking plural marking and so does not agree in number with *lasssssss palabras*, 'the words'. As Quechua does not mark number on modifiers, this lack of agreement may be possible evidence for cross-linguistic influence from Quechua. In a later section, I discuss how elongation of [s] indicates epistemic meaning.

(41) Porque casi no sé **toda lasssssss palabras**...
because almost neg. know-1-sg. all-fm.-sg. the-fm.pl. word-pl.
'Because I almost don't know all the words…'

In (42) below, we may observe that the verb, *viene*, 'he/she comes', is inflected for a third person singular subject rather than for a third person plural subject, as *amigos*, 'friends', would

demand. As Quechua's verb conjugation patterns are very regular, unlike the often-irregular patterns of Spanish, I argue that as a possible example of cross-linguistic influence from Quechua, and in an effort to simplify the Spanish conjugation patterns, this participant avoids producing a verb that is marked for plural number.

(42) Cuando **viene** así **mis** **amigos**...
when come-3-sg. así my-pl. friend-pl…
'When my friends comes…'

In general, in most of the cases where these participants do not agree for number, they are using a singular form in an environment in which a plural form is called for. Therefore, the singular forms are being generalized for both singular and plural meaning.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard number agreement cross-linguistic feature when they were found to employ nonstandard number agreement in Spanish.

NON-STANDARD GENDER AGREEMENT

The Spanish of these participants was also often found to lack gender agreement. In the following three examples, participants did not mark feminine gender on modifiers where it was called for, but instead produced modifiers of masculine gender: (43) ***este*** *forma*, 'this form', would standardly be realized as ***esta*** *forma*, (44) ***nuestro*** *cultura*, 'our culture', would be standardly realized as ***nuestra*** *cultura*, and (45) *son* ***buenos*** *todas*, 'they are all good', would be standardly realized as *son* ***buenas*** *todas*. In the following two examples, participants produced examples with modifiers of feminine gender where modifiers of masculine gender are called for: (46) ***nuestra*** *idioma*, 'our language', would be standardly realized as ***nuestro*** *idioma*, and (47)

pura *castellano*, 'strictly Castillian', would be standardly realized as ***puro*** *castellano*. As Quechua lacks grammaticalized gender, non-agreement of gender in Spanish may be interpreted as possible evidence of cross-linguistic influence from Quechua to Spanish.

Most of the cases of non-standard gender agreement involved a masculine modifier being used where a feminine modifier was required. This may suggest that as a simplification process, masculine forms are being generalized so that they neither signify masculine nor feminine grammatical gender.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard gender agreement cross-linguistic feature when they were found to employ nonstandard gender agreement in Spanish.

NON-STANDARD PERSON AGREEMENT

In the following seven examples of nonstandard person-agreement, third person singular verb forms, which are identical to second person formal (*Usted*) singular verb forms, are used where first person singular verb forms would have been produced standardly, based on the contexts in which these examples were produced. As Spanish is a pro-drop language, subject pronouns are not always produced overtly but instead are marked on the verbal conjugation. For this reason, in my English translations of the following examples, I enclose the possible verbal subjects within parentheses, as they are not explicitly stated: (48) ***ha*** *sido*, '(he/she/it/you(formal)) has/have been', which would be realized standardly as ***he*** *sido*, '(I) have been', (49) ***puede*** *ser professional*, '(he/she/it/you(formal)) can be a professional', which would be realized standardly as ***puedo*** *ser profesional,* '(I) can be a professional', (50) *me* ***va*** *a educar*,

'(he/she/it/you(formal)) is/are going to educate me', which would be realized standardly as *me* ***voy*** *a educar*, '(I) am going to educate myself', (51) *no* ***está*** *preparándo****se***, '(he/she/it/you(formal)) isn't/aren't preparing him/herself/your(formal)self', which would be realized standardly as *no* ***estoy*** *preparándo****me***, '(I) am not preparing myself', (52) ***prefiere***, '(he/she/it/you(formal)) prefer(s)', which would be realized standardly as ***prefiero***, '(I) prefer', (53) *¿Qué te* ***puede*** *decir?*, 'What can (he/she/it/you(formal)) tell you?', which would be standardly realized as *¿Qué te* ***puedo*** *decir?*, 'What can (I) tell you?', and (54) *Yo* ***va*** *a ser*, 'I (he/she/it/you(formal)) is/are going to be', which would be realized standardly as *Yo* ***voy*** *a ser*, 'I am going to be'.

In the following three examples, third person/second person formal singular forms are used where second person singular forms are called for: (55) *tú* ***usa*** *más quechua*, 'you (he/she/it/you(formal)) uses/use more Quechua', which would be standardly *tú* ***usas*** *más quechua*, 'you use more Quechua', (56) *te* ***imagina*** *cuando vas a trabajar*, ' (he/she/it/you(formal)) imagines/imagine when you go to work', which would be standardly *te* ***imaginas*** *cuando vas a trabajar*, '(you) imagine when you go to work', and (57) *si tú hablas el quechua,* ***es*** *descriminado*, 'if you speak Quechua, (he/she/it/you(formal)) is/are discriminated against', which would be standardly *si tú hablas el quechua,* ***eres*** *descriminado*, 'if you speak Quechua, you are discriminated against. As mentioned above, according to Romero (1993:259-60, 325), instances of lack of person agreement in cases where second person forms are involved are possible evidence of cross-linguistic influence from Quechua, as Quechua does not distinguish informal and formal second person singular forms while Spanish does. It is interesting to note that in these three examples above, we find the explicit production of the second person singular informal subject pronoun, *tú*, 'you', or the second person singular

reflexive pronoun, *te*, 'yourself'. Therefore, although the person agreement on the verbs in these examples is not always marked, it is obvious from the context who the subjects of the verbs are.

In the following example, a second person informal singular form is used where a first person plural form is called for: (58) *cuando llegamos a ciudad* ***hablas*** *allí castellano*, 'when (we) arrive to city (you) speak Spanish there', which would be standardly *cuando llegamos a la ciudad* ***hablamos*** *allí castellano*, 'when (we) arrive at the city (we) speak Spanish'. In the following example, a second person singular informal form is used where a first person singular form is called for (59) ***estás*** *feliz con mis mamas* '(you) are happy with my parents (literally, 'mothers'), which would be standardly *estoy feliz con mis padres*, '(I) am happy with my parents'.

In general, among my participants, in cases of nonstandard person agreement, the third person singular/second person formal singular form is employed. As Quechua verb conjugation follows completely regular patterns, unlike the verb conjugation patterns of Spanish, avoidance of complex verb conjugation may be a possible result of cross-linguistic influence from Quechua. Also, this may suggest that rather than conjugate verbs for person, as a form of simplification, often Quechua speakers choose to generalize the third person/second person formal singular form. In each of the instances where person agreement was lacking in the speech produced by my participants, it was obvious from the discourse context who the subjects of the non-agreed verbs were.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard person agreement cross-linguistic feature when they were found to employ nonstandard person agreement in Spanish.

5.6.1.2. Non-standard Article, Preposition, and Object Pronoun Agreement

As mentioned above, Romero (1993:182-6 for Peru), Lipski (1996:348 for Peru), and Lee (1997:157-160 for Andean Spanish) all mention the deletion or nonstandard use of articles and prepositions as characteristic of the Spanish spoken by Quechua-Spanish speakers. Romero attributes these phenomena to the fact that Quechua lacks articles and some prepositions (1993:182-6). While speaking Spanish, Lee (1997:157-160) finds bilingual Quechua-Spanish speakers to delete prepositions, add superfluous prepositions, and misuse one preposition for another. It is important to add that in Quechua, suffixes, rather than isolated words, are often used to convey prepositional meaning.

Also, Romero (1993:256-7 for Peru), Lipski (1996:195,214,269,345-7 for Peru, Bolivia, Ecuador, and Argentina), Lee (1997:74 for Andean Spanish) and de Granda (2001:77 for Peru, Bolivia, Ecuador, and Argentina) have all observed nonstandard usage of the Spanish direct, *lo, la, los, las*, and indirect, *le, les,* object clitics. Each of these scholars has found that lack of concord in the use of these object clitics is characteristic of the Spanish of Quechua-Spanish bilingual speakers. Here, it is important to note that Quechua does not make use of object pronouns. Rather, the accusative suffix, *-ta*, or the illative suffix, *-man* may be attached onto a subject or subject pronoun to indicate direct or indirect objectivity. Also, Quechua makes use of a series of verbal 'pronominal' suffixes that mark on the verb both for subject and object (i.e. the Quechua first person subject to second person object pronominal verbal suffix is *–yki*).

In Table 20 below, I present the total counts and percentages of my participants who possessed the Preposition, Article, and Object Pronoun Nonstandard Agreement CLF, meaning that these participants employed nonstandard agreement.

Table 20. Non-standard Preposition, Article, and Object Pronoun Agreement CLF

	Preposition Agreement	Article Agreement	Object Pronoun Agreement
Count	68	62	54
Percent	97.14%	88.57%	77.14%

NON-STANDARD PREPOSITION AGREEMENT

In the following example, the preposition, *por*, 'with/through the means of', has been deleted by one of my study participants: (60) *nos llamamos* ***Ø*** *pura quechua*, 'we call each other strictly Quechua'. Here, standard Spanish would require the insertion of the preposition, *por*: *nos llamamos* ***por*** *pura quechua*, 'we call each other with/in/through the means of Quechua'. In the following example, a superfluous preposition, *de*, 'of', is inserted and the verb is inflected for third person singular/second person formal singular, although the context demands a third person plural conjugation: (61) *como vivía* ***de*** *ellos*, literally 'how of they (he/she/it/you(formal)) used to live'. The standard Spanish here would be *como vivían ellos*, 'how they used to live'. As Quechua, unlike Spanish, generally conveys prepositional meaning through the use of suffixes rather than with isolated words, avoidance of prepositions or nonstandard preposition agreement may be possible evidence of cross-linguistic influence from Quechua to Spanish.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard preposition agreement cross-linguistic feature when they were found to either avoid the use of prepositions in Spanish or employ nonstandard preposition agreement in Spanish.

'Hay veces' Preposition Avoidance

A total of 29 of these 70 participants, representing 41.43% of the sample, produced the expression, *hay veces*, 'there are times', in Spanish in place of the standard Spanish expression, *a veces*, literally 'at times', and usually translated as 'sometimes' in English. Replacing the *a*, literally the preposition, 'at', of *a veces* with the verb, *hay*, 'there is/there are' may be a special case of preposition avoidance. The expression, *hay veces* appears in the following three examples: (62) ***hay veces*** *no hablan quechua, así*, 'there are times (they) don't speak Quechua', (63) *porque para el trabajo,* ***hay veces*** *con la gente que no sabe hablar quechua, no puedesssss conversar así, sí pues*, 'because for work, there are times with the people that don't know how to speak Quechua, (you) can't talk', and (64) *cuando trabajan en oficina* ***hay veces*** *no comprenden*, 'when (they) work in office there are times (they) don't understand'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the *hay veces* preposition avoidance cross-linguistic feature when they were found to produce the expression, *hay veces*.

NON-STANDARD ARTICLE AGREEMENT

In the following example, the masculine singular definite article, *el*, 'the', has been left out: (65) *en* ***Ø*** *futuro*, 'in future'. Here, the standard Spanish would be *en* ***el*** *futuro* 'in the future'. In the following example, the feminine singular definite article, *la*, 'the', has been left out: (66) *he tenido* ***Ø*** *oportunidad de escuchar*, 'I have had opportunity to listen'. Here, the standard Spanish would be *he tenido* ***la*** *oportunidad de escuchar*, 'I have had the opportunity to

listen'. In the following example, the entire contraction, *del*, 'from the', containing the preposition, *de*, 'from', and the masculine singular definite article, *el*, has been left out: (67) *y cuando vienen **Ø** campo asi la gente*, 'and when the people (they) come countryside'. Also in (67), we may note that the verb is inflected for third person plural while the context demands third person singular. In (67), the standard Spanish would be *y cuando la gente viene **del** campo*, 'and when the people come from the countryside'. As Quechua does not make use of articles, nonstandard article agreement may be evidence of possible cross-linguistic influence from Quechua.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard article agreement cross-linguistic feature when they were found to either avoid the use of articles or employ nonstandard article agreement in Spanish.

NON-STANDARD OBJECT PRONOUN AGREEMENT

In the following example, the plural indirect object pronoun, *les*, '(to/for) them', is left out: (68) *piensan que **(Ø)** estamos insultando**(Ø)***, '(they) think that (we) are insulting'. Here, standard Spanish would demand *piensan que **les** estamos insultando* or *piensan que estamos insultándo**les***, '(they) think that (we) are insulting them'. In the following example, the singular indirect object pronoun, *le*, '(to/for) him/her/it/you(formal)) is used where the plural indirect object pronoun, *les*, '(to/for) them' is called for: (69) *cuando **le** hablamos así quechua así molestan así a veces*, 'when (we) talk to him/her/you(formal) Quechua (they) are bothered'. Here, the standard Spanish would be *cuando **les** hablamos en quechua se molestan*, 'when (we) talk to them in Quechua (they) are bothered'. In the following example, the feminine singular

direct object pronoun, *la*, 'her', and then the singular indirect object pronoun, *le*, '(to/for) him/her/it/you(formal)', are used where the plural indirect object pronoun, *les*, '(to/for) them' is called for in both cases: (70) *a unos señores cuando* ***la*** *ayudaba cargando así* ***le*** *hablaba quechua y no me comprendía*, 'when (I) used to help some men (and women) (by) carrying (I) used to talk to him/her/it/you(formal) Quechua and (he/she/it/you(formal) did not understand me'. Here, the standard Spanish would be *cuando* ***les*** *ayudaba a unos señores cargando,* ***les*** *hablaba en quechua y no me comprendían*, 'when (I) used to help some men (and women) (by) carrying, (I) used to talk to them in Quechua and (they) did not understand me'. As Quechua does not have object pronouns, but instead marks accusative case or illative case on subjects or subject pronouns with the suffixes *–ta* and *–man* and also makes use of pronominal verbal suffixes which indicate both the subject and object, nonstandard agreement or deletion of object pronouns in Spanish may be evidence of possible cross-linguistic influence from Quechua to Spanish.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard object pronoun agreement cross-linguistic feature when they were found to either avoid the use of object pronouns or employ nonstandard object pronoun agreement in Spanish.

5.6.2. Calques

In the following three sections, I present examples of Quechua calques used by my participants in Spanish, *no más*, *ya*, and the diminutive *-ito/a*. In Table 21 below, I present the counts and percentages of my participants who possess these Calque CLF.

Table 21. Diminutive, *No más*, and *Ya* CLF

	No más	*Ya*	Diminutive *–ito/a*
Count	47	23	22
Percent	67.14%	32.86%	31.43%

5.6.2.1. '*No más*' Calque

Lee explains that in Andean Spanish, the Spanish expression, *no más*, 'no more', has been restructured as a calque of the limitative Quechua suffix, *-lla* (1997:157-160). Furthermore, Lee (1997:157-160) finds the expression, *no más*, to be used to signify 'only', 'not only', an intensifying meaning, an emphatic meaning, and a softening meaning. The Quechua suffix, *-lla*, carries all of these meanings. In the following two examples, my participants used *no más* with the meaning of 'only': (71) *Tranquilo en el campo vivimossss, solo solo nos falta plata* ***no mássss***, '(We) live quietly/calmly in the countryside, we're only lacking money', and (72) *Viven así hablándonos quechua* ***no más*** *viven*, literally '(They) live speaking only Quechua amongst ourselves (they) live'. In the following example produced by one participant, we find that *no más* has an 'intensifying meaning': (73) *poco* ***no más****, sí*, 'just a little'. In the following example, *no más* carries a 'softening meaning': (74) *En el campo cuando voy así a mi pueblo así hablamos de quechua, alegres* ***no más*** *mmm hmm*, literally 'In the countryside when I go to my town we talk of Quechua, (simply) happy'. In (74), the preposition, *de*, 'of', is being used where the preposition, *en*, 'in', should be used instead. Use of *no más* as a calque of the Quechua *–lla* is obvious evidence of Quechua to Spanish cross-linguistic influence.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as

possessing the *no más* calque cross-linguistic feature when they were found to use *no más* as a calque of the Quechua *–lla*.

5.6.2.2. '*Ya*' Calque

As in the case of the Spanish expression, *no más*, Lee finds that the Spanish word, *ya*, 'already', has been restructured as a calque of the Quechua discontinuative suffix, *-ña* (1997:157-160). According to Dora Aráoz and Américo Salas, the Quechua suffix, *-ña*, which they translate as the Spanish *ya*, 'already', may be repeated in Quechua sentences without duplicated meaning (1993:108-9). Aráoz and Salas provide the following two Quechua examples: *Qulqey* ***ña*** *kashan****ña*** 'I already have money', and ***Ña*** *hanpirachimuni****ña***, 'I already cured him/her'. Lee observes that in order to express the Spanish meaning, 'already', native Quechua speakers often place *ya* both before the verb and sentence-finally. In the following three examples, I found my participants to repeat *ya* within their utterances, to indicate the Spanish meanings, 'already', 'anymore', and 'as soon as' respectively: (75) ***Ya*** *he acabado* ***ya*** *mis estudios de tres años*, '(I) have already finished my three years of study', (76) *pero ahora* ***ya*** *no es así* ***ya***, 'but (it) is not like that anymore', (77) *Siempre a una persona* ***ya*** *así se viste con buenossss ropassss* ***ya*** *se olviden, algunos*, 'Always a person, as soon as (he/she) dresses himself/herself with fine clothes, (they) forget, some people'. This duplication of *ya* mirrors the Quechua tendency to duplicate *–ña* and so is obvious evidence of Quechua to Spanish cross-linguistic influence.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as

possessing the *ya* calque cross-linguistic feature when they were found to duplicate *ya* within their utterances.

5.6.2.3. Spanish Diminutive *-ito/a* Calque

In Quechua, the first-person singular possessive suffix, *-y*, is very frequently added onto the ends of Quechua nouns in order to denote affection. The use of this suffix has been calqued in Spanish with the Spanish diminutive suffix, *-ito/a* (Lipski 1996:213-14, 238,268 for Bolivia, Colombia, and Ecuador). In Lipski's example, *corazoncitoy*, 'my dear little heart', we find a combination of the Spanish diminutive, *-ito* along with the transferred Quechua suffix, *-y* (1996:213-214). Similar to Lipski's finding, one of my study participants produced the following: (78) *Les trataría con cariño o les trataría como hermano**toy***, '(I) would treat them with kindness or (I) would treat them like my dear brother'. In this example, this participant shortens the Spanish diminutive suffix, *-ito* to *–to* and adds the directly-transferred Quechua suffix, *-y*. In the following three examples produced by my participants, we may also find the Spanish diminutive being used to denote affection: (79) *Así es mam**ita***, 'That's how (it) is, my dear woman', (80) *No sé todavía, mam**ita***, '(I) don't know yet, my dear woman', and (81) *Todo me gusta, los ovejas, los vacas, los chanch**itos**, así*, 'I like everything, the sheep, the cows, the (dear/little) pigs'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the diminutive *–ito/a* calque cross-linguistic feature when they were found to use the Spanish diminutive to denote affection.

5.6.3. Re-structuring the Spanish Verb

As mentioned above in the sections on the various Nonstandard Agreement CLF, Quechua has very regular verb conjugation patterns while Spanish does not. I have argued above that this difference may motivate nonstandard agreement in the Spanish produced by native Quechua speakers. In the immediately following sections, I examine the nonstandard use of verbs and verb conjugation, the nonstandard use of gerunds, and the nonstandard use of the subjunctive by my study participants. In Table 22 below, I present the total counts and percentages of those study participants who possess these CLF.

Table 22. Nonstandard Verb Conjugation, Gerund, and Subjunctive CLF

	Verb Conjugation	Gerund	Subjunctive
Count	67	37	19
Percent	95.71%	52.86%	27.14%

5.6.3.1. Non-standard Verb Conjugation

In the following two examples, participants 'regularize' irregular Spanish verb conjugations: (82) *La cultura quechua realmente que por sus idiomas o por sus disfrases, eh ese es más por sus disfrases, como* ***tenieron*** *los Incas y por su idiomas también, no? sí digamos*., 'The Quechua cultura really through its languages or through its costumes, um that's more through its costumes, as the Incas had and through its languages also, right? let's say' and (83) *Si esa persona* ***sabería*** *no hablaría eso a lo a revés*, 'If that person would know (he/she) wouldn't speak that, quite the opposite'. In example (82), this participant produces *tenieron* rather than the standard *tuvieron*. As *tuvieron* is an irregular conjugation, this participant 'regularizes' the conjugation as *tenieron*, which would follow a more regular pattern. In (83), this participant

produces *sabería* rather than the standard *sabría*. Here again, this participant produces a more regular form that is nonstandard.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard verb conjugation cross-linguistic feature when they were found to mis-conjugate verbs, use infinitive verbs in situations where the use of conjugated verbs would be standard, delete verbs, or use certain verbs where others would be used standardly.

5.6.3.2. Non-standard Gerund Use

Lipski notes that in Ecuador, bilingual Quechua-Spanish speakers have been found to employ the use of the gerund in order to avoid using conjugated verbs (1996:270). I have also found this to occur among my participants, as in the following examples: (84) *de pueblo usted* ***trabajando*** *todo de castellano de ahora*, literally 'of town you working everything of Spanish of now'. In standard Spanish, (84) would be *en los pueblos se* ***trabaja*** *ahora por puro castellano*, 'in the towns one works now by means of only Spanish'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the nonstandard gerund cross-linguistic feature when they were found to use gerunds non-standardly.

5.6.3.3. Avoidance of the Subjunctive

According to Romero (1993:193), Peruvian Quechua-Spanish speakers have been found to avoid using the subjunctive where it would occur in standard Peruvian Spanish. One

participant of this study, upon being asked whether he would vote for a Quechua-speaking candidate, responded that he would, (85) *para que **ayuda** a los campesinos*, 'so that (he) helps (indicative) the peasants'. In (85), the standard Spanish would incorporate the use of the subjunctive, as *para que **ayude** a los campesinos*.

De Granda claims that due to morphosyntactic influence from Quechua, throughout the Andean area, bilingual Quechua-Spanish speakers have been found to replace the standard Spanish subjunctive with the conditional verb tense in some constructions (2001:109). In the following example, one of my study participants used the conditional in this way: (86) *Si no, ahorita yo estaría estudiando si yo **tendría** medios económicos*, literally 'If not (if that wasn't the case), right now I would be studying if I would have economic means'. In (86), the standard Spanish would be *Si no, ahorita yo estaría estudiando si yo **tuviera** medios económicos*, 'If not (if that wasn't the case, right now I would be studying if I had economic means'. As Quechua does not have a subjunctive mood but instead makes use of the conditional, this example may represent possible cross-linguistic influence from Quechua to Spanish.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the avoidance of the subjunctive cross-linguistic feature when they were found to avoid using the subjunctive where it would be produced standardly.

5.6.4. Non-standard Word Order

A number of language contact scholars have found evidence of the morphosyntactic influence of Quechua word order on Spanish. Odlin (1989) has found that native Quechua speakers transfer the basic Quechua word order, SOV, to their second language, Spanish, which

is widely considered to have an SVO word order. Romero (1993:191) echoes this claim in his work. Also, Lipski (1996:346) recognizes that the word order, Object + Verb, a word order uncharacteristic of panhispanic Spanish, results in the Spanish of native Quechua speakers through cross-linguistic influence (1996:346). Lee further explains that in Quechua, the complements of the verb are placed before the verb, while in Spanish the opposite is true (Lee, 1997:53).

A total of 68 of my subset of 70 participants produced nonstandard word order, representing 97.14% of this population. In the following two examples, participants placed the verb sentence-finally: (87) *Sí porque quechua más* ***hablamos***, 'Yes because (we) speak more Quechua'. In standard Spanish, (87) would be, *Sí porque* ***hablamos*** *más quechua*. After I asked one participant the following, *¿Cómo vive la gente en el campo?*, 'How do people live in the countryside?', she immediately rephrased my question as (88) *¿En el campo la gente cómo* ***vive****?*, 'In the countryside, how do people live?'. In the following two examples, participants repeat a verb sentence-finally: (89) *Ahora se* ***habla*** *en castellano no más* ***habla***, literally 'Now one speaks in only Spanish speaks', and (90) ***Viven*** *así hablándonos quechua no más* ***viven***, literally '(They) live speaking only Quechua amongst ourselves (they) live'. Example (90) here was also presented as example (72) above. In examples (89) and (90), uttering the same verb both in the standard Spanish position as well as utterance-finally may represent a compromise between standard Spanish syntax and the impetus from Quechua to place the verb finally. Lee (1997) also notes this phenomenon of SVOV word order. Thus, this is possible evidence for cross-linguistic influence from Quechua to Spanish.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as

possessing the nonstandard word order cross-linguistic feature when they were found to employ nonstandard word order.

5.6.5. Double Possessive

We may find another example of morphosyntactic influence of Quechua on Spanish in the case of the possessive. In Quechua, the possessive structure is formed as follows: Possessor (+ genitive morpheme) + Possessed (+ possessive person morpheme). For example, the Quechua expression, *warmi**q** wasi**n***, which may be parsed as *warmi-**q** wasi-**n***, is literally 'woman-(genitive suffix) house-(3rd person singular possessive suffix), or '(the) woman's house'. As the use of two possession morphemes is involved in the construction of the Quechua possessive, some linguists have referred to Quechua as having 'double possessives'. Lee (1997:52) explains that as a result of morphosyntactic influence, double possessives are formed by Quechua speakers in Spanish by the combination of a prepositional phrase headed by *de*, 'of' and the use of a possessive adjective. Lipski also notes the presence of double possessives in the Spanish of Quechua-Spanish bilingual Bolivian and Peruvian speakers. Romero (1993:180), who also notes this phenomenon among Peruvian Quechua-Spanish bilinguals, claims that Peruvian monolingual Spanish speakers also use the Quechua-influenced possessive structure, thus representing an instance of convergence of Peruvian Spanish toward Quechua.

A total of 7 of my subset of 70 participants, representing 10.00% of this population, possessed this Double Possessive CLF. This construction may be observed in the following examples: (91) ***sus*** *hijos* ***de*** *la señora*, literally 'her children of the woman', 'the woman's children', (92) ***de*** *esa chiquita* ***su*** *mamá*, literally 'of that little (girl) her mother', 'that little

(girl's) mother', and (93) ***su*** *religión* ***de*** *los Incas*, literally 'their religion of the Incas', 'the Incas' religion'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the double possessive cross-linguistic feature when they were found to produce 'double possessives' in Spanish.

5.6.6. Cross-Linguistic Influence of the Cuzco Quechua Epistemic System

5.6.6.1. Spanish Perfect Tenses

As has been explained in detail above, many investigators have claimed that the Spanish present perfect and past perfect verb tenses are used by native Quechua speakers in Spanish to communicate epistemic meaning. Some investigators (who have been cited above) have claimed that this occurs due to the influence of the Quechua epistemic suffixes, *-mi/-n* and *–si/-s*, while others (who have been cited above) have claimed that this occurs due to the influence of the Quechua past tenses, *-rqa-* and *-sqa-* or both the suffixes and the past tenses together.

In my data, the hypothesis that the Spanish perfect tenses indicate a contrast in epistemic meaning is not upheld. Below, in Table 23, I present the total counts and relative percentages of four different past tenses used by my study participants in Spanish.

Table 23. Past Verb Tenses

	Present Perfect	Imperfect	Preterite	Past Perfect
Count	48	43	25	4
Percent	68.57%	61.43%	35.71%	5.71%

Each of the four participants, out of the subset of 70 participants, who produced instances of the past perfect (two participants produced the past perfect verb tense a total of two times and two

participants produced the past perfect just once) clearly communicated information that was gathered through his/her direct, first-hand experience. In general, I found my participants to avoid the use of the past perfect tense in Spanish and to prefer the present perfect and imperfect tenses while discussing past events.

As the present perfect and imperfect verb tenses follow more regular patterns than does the preterite verb tense and since Quechua verb conjugation follows completely regular patterns, a preference for the more regular Spanish past tense forms may indicate possible evidence of cross-linguistic influence from Quechua to Spanish. Also, often my participants produced nonstandard, 'regularized' preterite tense forms where irregular preterite forms would have been standardly called for.

While I do include nonstandard verb conjugation and nonstandard use of all verb forms within the category of the nonstandard verb cross-linguistic feature, as mentioned above, I do not categorize my participants' realization of the four different past verb tenses listed here as cross-linguistic features. Therefore, my participants' use of the four past verb tenses, as described in Table 23, is not included in the participants' Total CLF Scores, Calque-Weighted Total CLF Scores, or Implicational-Weighted Total CLF Scores.

5.6.6.2. '*Dice*' Epistemic Calque

As described above, Lipski (1996) and de Granda (2001) have claimed that Quechua-Spanish bilinguals living throughout South America use forms of the Spanish verb, *decir*, 'to say', as calques of the Quechua epistemic suffix, *-si/-s*, in order to express the fact that information has been obtained indirectly. In my data, I found a total of 17 of my subset of 70 participants, representing approximately 24% of this subset of the population, to use forms of

decir as calques. However, rather than claiming that the use of these calques indicates only that information has been obtained indirectly, I claim that forms of *decir,* like *dice*, may be used to calque the variety of meanings that I presented as being indicated by the -*si/-s* and -*sqa*- Quechua epistemic suffixes in the previous chapter. In other words, I argue that forms of the verb, *decir*, may be used as calques that indicate a lower level of certainty, less trustworthy sources of information, less Speaker participation, and Farther Temporal, Spatial, and Psychological Distances.

In the following example, a participant employs the use of a form of *decir* while discussing information that he/she does not agree with: (94) *A veces* ***dicen*** *que, ¿cómo se llama? Quechua es solo hablan los cholos, los indios, campos* ***dicen****, pero no es*, literally, 'Sometimes (they) say that, what is it called? Quechua is only (they) speak the *cholos*, the Indians, countrysides (they) say, but it isn't.' In other words, in (94), this participant expresses disagreement with the idea that Quechua is spoken only by indigenous peasants in the countryside. As this participant does not agree with the concept in question, as would be consistent with the use of -*si/-s* and -*sqa*- in Quechua, Far Psychological Distance may apply.

In the following example, a participant describes a third party's dishonesty and then expresses his/her knowledge of the truth: (95) *Ya no quiere y* ***dice*** *por gusto todo allá, pero la verdad es que sabe hablar quechuas*, literally, '(He/she) doesn't want (to speak Quechua) anymore and (he/she) says everything just for kicks there, but the truth is that (he/she) knows how to speak Quechua.' In (95), the use of *dice* in the first part of the utterance is used to describe another's dishonesty. Therefore, as this participant does not agree with the third party's dishonesty, Far Psychological Distance may also apply here. Furthermore, the dishonest third party is not a trustworthy source of information.

In the following example, a participant puts acquired information about the practices of the Incas of the past into question: (96) *…¿Qué religion tenían verdaderamente? Según la historia nos* ***dicen*** *ellos adoraban al Sol, al Agua, la Luna, eso*, literally, 'What religion did they really used to have? According to history (they) tell us they used to worship the Sun, the Water, the Moon, that'. As this participant puts the information acquired from history into question, Far Psychological Distance may again apply. Furthermore, this participant indicates that in this case, history may not be a trustworthy source of information. Moreover, a lower level of certainty and Far Temporal Distance may also apply, as the event in question, the Incas' practicing religion, occurred relatively long ago.

'*HABLAR*' SEMANTIC EXTENSION

Further evidence to support the use of forms of *decir*, 'to say', as a calque of *-si/-s* and *-sqa-* is that I have found my participants to semantically extend the Spanish verb, *hablar*, 'to speak/talk', in order to encompass the standard meaning and uses of *decir*. In other words, since an important use of forms of *decir* is to calque the Quechua epistemics, *-si/-s*, and *-sqa-*, in order to simply express the meaning, 'to say', I hypothesize that many of my participants resort to a different verb, namely, *hablar*, in order to avoid being perceived as calquing the Quechua epistemics when this was not intended.

In the following three examples, forms of the verb, *hablar*, are used where forms of the verb, *decir*, would be used standardly: (97) *Los que no entiende quechua no te no entiende lo que estás* ***hablando****, ¿no?*, literally 'Those who (he/she) doesn't understand Quechua (he/she) doesn't understand you what you're speaking, right?' (example (97) would be standardly realized as *Los que no entienden quechua no entienden lo que estás* ***diciendo***, 'Those who don't

understand Quechua don't understand what you're saying.'), (98) *así como estoy así* ***hablo*** *palabras*, literally 'as (I) am (I) speak words' (example (98) would be standardly realized as *como estoy* ***diciendo*** *palabras*, 'as (I) am saying words'), and (99) *una persona se ha perdido y* ***habla*** *después "No conozco" así*, literally, 'a person has gotten lost and (he/she) speaks later "(I'm) not familiar (with this place)'. Example (99) would be standardly realized as *una persona se ha perdido y* ***dice*** *después, "No conozco"*, 'a person has gotten lost and says later, "(I'm) not familiar (with this place)'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the *dice* calque cross-linguistic feature when they were found to produce *dice* as a calque of the Quechua epistemics, *-si/-s*, and *-sqa-*.

5.6.6.3. '*Pues*' Epistemic Calque

As described above, Zavala (2001) claims that *pues*, 'well, then, since', which may also be realized as *pue* and *pe*, is used as a calque of the Quechua epistemic suffix, *-mi/-n*, indicating that information has been obtained directly. I found 45 out of my subset of 70 participants, representing approximately 64%, to use *pues* as a calque. However, rather than indicating only that information has been obtained directly, I claim that this calque may be used to indicate all of the Quechua epistemic meanings indicated by the *-mi/-n* and *-rqa-* epistemic suffixes, as described in the previous chapter. In other words, I claim that *pues* used as a calque may convey higher levels of certainty, more trustworthy sources of information, more Speaker participation, and Closer Temporal, Spatial, and Psychological Distances.

Pues is used as a calque in this way in the following five examples: (100) *Hermoso quechua es* ***pue***, literally, 'Beautiful Quechua is', which would be realized standardly as *Quechua es hermoso*, 'Quechua is beautiful', (101) *Quechua es bonito es,* ***pue***, literally 'Quechua is beautiful is', which would be realized standardly as *Quechua es bonito*, 'Quechua is beautiful', (102) *Porque más nosotros hablamos en castellano acá en ciudad, por eso es* ***pe***, 'Because we speak more in Spanish here in the city, that's why', (103) *porque essss quechua es bonito porque idioma de de Inca es* ***pe****, sí*, literally 'because (it) is Quechua is beautiful because language of of Inca (it) is', and (104) *porque para el trabajo, hay veces con la gente que no sabe hablar quechua, no puedes conversar así sí* ***pues***, literally, 'because for work, there are times with the people who don't know how to speak Quechua, you can't converse'.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as possessing the *pues* calque cross-linguistic feature when they were found to produce *pues* as a calque of the Quechua *-mi/-n* and *-rqa-*.

5.6.6.4. Six Other Epistemic Calque Stategies for Quechua *-mi/-n* and *-rqa-*

Besides the use of *pues*, I observed six other strategies for calquing the Quechua epistemic suffixes, *-mi/-n* and *-rqa-*, which were used relatively frequently throughout the Spanish produced by my study participants. These are the use of *así*, *sí*, elongated [s] (*ssss…*), nonstandard pluralization, *siempre*, and word-final voiceless fricative [r]. The word-final voiceless fricative [r] was also frequently elongated. As in the case of *pues*, consistent with the meaning and usage that I claim for *-mi/-n* and *-rqa-*, I claim that these six calques are used to

convey higher levels of certainty, more trustworthy sources of information, more Speaker participation, and Closer Temporal, Spatial, and Psychological Distances. In Table 24, I present the numbers of participants who were found to use these six calques out of the subset of 70 participants as well as the percentages that these counts represent out of the total subset of 70.

Table 24. Epistemic Calque Strategies for Quechua *-mi/-n* and *-rqa-*

	Así	Sí	Sssss	Pluralization	Siempre	Voiceless [r]
Count	65	62	59	41	40	40
Percent	92.86%	88.57%	84.29%	58.57%	57.14%	57.14%

Each of these six calque elements may be placed alone or in multiples throughout utterances. In the following four examples, I present instances of the use of these six calque strategies: (105) *Es bonito para conversar **así** con mis amigos **sí**, no?*, '(It) is great to talk with friends, right?', (106) *Yo de vez en cuando **siempre** escucho en ¿cómo se llama?, radio**s** en quechua*, 'I sometimes listen to, what's (it) called? radio in Quechua', (107) *Porque los Inca**sssssssss** **así** antes hablaban Quechua*, 'Because the Incas used to speak Quechua', and (108) *Porque puedo comunicar con las persona**sss** que no saben habla**r** que son del campo*, 'Because (I) can comunícate with the people who don't know how to speak who are from the countryside'.

It is interesting to note that each of these six calque strategies as well as *pues* contains a voiceless fricative. Excluding the voiceless fricative [r], all of the other six calques (including *pues*) for the Quechua *-mi/-n* and *-rqa-* include the voiceless fricative [s]. Furthermore, upon examination of the examples above, we may observe that the calques do not add propositional content to the sentences in which they are found but simply indicate epistemic meaning.

For the purpose of measuring the Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores of my participants, I counted my participants as

possessing these six calque cross-linguistic features when they were found to produce them as calques of the Quechua *-mi/-n* and *-rqa-*.

5.7. Possible Influence of Epistemics on the Quechua Worldview

It is reasonable to wonder whether the fact that the Quechua language makes use of a grammaticized epistemic system would be reflected in the Quechua speakers' worldview and whether this worldview might differ from that of speakers of languages that do not encode epistemology grammatically, such as Spanish. Johnstone explains, "One way in which language and thought might be related is that the possibility of human cognition and human experience might depend on the fact that humans are language users" (2002:32). According to the 'Sapir-Whorf Hypothesis', or 'linguistic relativism', categories of thought may be determined or influenced by categories of language (Johnstone, 2002:33). While carrying out participant observation for this investigation, I came across a few Quechua cultural traits that speak to the issue of whether the Quechua language's grammaticized epistemic system might influence the Quechua speakers' worldview.

The participants of my study, mostly native Quechua speakers, feel themselves to be heirs of the very rich and complex culture of the Incas. When asked to describe the Inca culture, one special phrase has often come to mind for them: *Ama suwa, ama llulla, ama qhella*. This phrase, 'Don't steal, don't lie, don't be lazy', has been passed down as perhaps the most important moral and cultural teaching of the Incan Empire. When asked whether the modern-day Quechua-speaking descendants of the Incas still practice elements of the Incan culture, many of my participants responded that they do, as they do not lie, do not steal, and are not lazy. In

other words, they characterize themselves as a group as being honest and hard working. In contrast, they often characterize the native Spanish-speakers as having inferior morals.

Below, I present a variety of excerpts from transcribed Language Attitude interviews with my participants. Following each of these excerpts, I provide a loose translation. Each of these excerpts exemplifies my participants' views concerning the Quechua or Incan culture as well as their characterizations of the native Spanish-speaking culture. In the following excerpt, one participant states that the phrase, 'Don't steal, don't lie, don't be lazy', defines the Quechua culture:

(109) *Es bonito. Muchas veces algunas personas discrepan de que el quechua... Una persona que no ha estudiado quizás sabe mucho mas que una persona estudiado, ¿no? Y cultura quechua es que hay una regla que se puede decir una lema de los Incas todavía, ama qhella, ama suwa, ama llulla, ¿no? Y entonces la cultura quechua es mucho mejor que el castellano.*

'It's beautiful. Many times some people complain that Quechua…A person who has not studied perhaps knows much more than a learned person, right? And the Quechua culture is that there is a rule that one could say a saying from the Incas still, don't be lazy, don't steal, don't lie, right? And so the Quechua culture is much better than the Spanish.'

When asked to describe the Quechua culture, another participant expresses how the Quechua culture used to be and that the Quechua speakers today still strive to obey the same teachings observed in the past:

(110) *Como en sus costumbres sus obras sus hechos como por ejemplo en tiempo de Inca ha sido trabajos fuertes y o sea en aquella época enseñó ser este trabajador este no robar, no ser vago. Entonces, ellos quieren ser así, ¿no? Mmm hmm, y así.*

'As in their traditions their works their accomplishments for example during the time of the Incas there were great labors and I mean at that time they taught you to be hard working, not to steal, not to be a vagabond. So, they want to be like that, right?'

Another participant describes the Quechua culture in a similar way:

(111) *Porque bonito se expresa en quechua. Al menos en quechua, dice ¿no? También los los que aprenden los Incas, ama llulla, ama qhella, ama suwa. Entonces al menos ellos practican mucho eso, ¿no? No mentir, no robar.*

'Because it is beautiful when one expresses himself in Quechua. At least in Quechua, right? Also those who learn from the Incas, don't lie, don't be lazy, don't steal. So, at least they practice that a lot, right? not to lie, not to steal.'

In the following excerpt, a participant describes her idea of the nature of the Quechua culture, lifestyle, and common goals among Quechua-speaking women:

(112) *Ay vive, comunicándose, haciendo broma, y trabajando. Le gusta trabajar en el campo. He visto que los niños también este trabajan de la madrugada que pasteen sus ovejas y como se llama este, de allí a pastear, que aprendan a como se llama, administrar el hogar en campo y que se casen con un hombre que que sea trabajador que sea este que XXX por su hogar y sobre todo con sus hijos que sean fieles, no? que no sean borrachos.*

'They live by communicating with each other, making jokes, and working. They like to work in the fields. I have seen that children also work starting in the very early morning that they should herd their sheep and, what is it called? from there they go herd and they should learn, what is it called? to take care of the home in the countryside and they should marry a man who is hard working and who will XXX for his home and above all with his children who should be loyal, right? and not drunkards'.

In the following excerpt, a participant compares the Quechua and Spanish-speaking cultures:

(113) *Este, es castellanos esssssss siempre mienten tienen y loss quechuass los muy duro tienen, fuertes también en los campos.*

'Well, the Spanish-speakers always lie and the Quechua-speakers are very strict and also strong in the fields.'

In the following excerpt, another participant describes the culture of the native Spanish-speakers:

(114) *Para ellos es fornicar, para ellos es estar borrachos, para ellos es estar con la droga, para ellos estar con la marihuana. Bueno, bueno, unos cuantos, algunos que son que les sobra la plata, ¿no? Bueno, yo creo que, yo creo que los castellanohablantes son así.*

'They are all about sleeping around, being drunk, taking drugs, and taking marihuana. Well, for some who have extra money, right? Well, I think that, I think that the Spanish-speakers are like that.'

Such a negative view of Spanish-speakers may have originated among Quechua speakers during the Spanish conquest. One participant explains:

(115) *Los españoles todo a todo los Incas lo mataron y se lo llevaron sus oros platas todo lo que todos los riquezas que tenían...*

'The Spaniards killed all of the Incas and took away their gold, silver, all the riches that they had…'

Therefore, after examination of the excerpts above, it is obvious that honesty and integrity are very important aspects of the Quechua culture and lifestyle. In Quechua, when speakers use their epistemic system of suffixes and verb tenses, along with the information that is conveyed, these speakers provide information to the hearers regarding the speakers' stance or attitude toward the information being conveyed. In general, when speakers use epistemics, they qualify the truth of the information they pass on, thereby expressing an attitude or disposition toward that information. As has been described above, the Quechua epistemic markers may convey such things as the speakers' level of certainty regarding the truth-value of the information in question, whether the information originated from more or less trustworthy sources, more or less Speaker participation in the event under discussion, and Closer or Farther Temporal, Spatial, and Psychological Distance.

By making use of an epistemic system, speakers provide their hearers with more information than they would were they not to use epistemic markers. The added information provided to hearers through the use of epistemics, conveying the speakers' attitude toward the information, provides the hearers with further insight into the possible truth-value of the information being conveyed. In other words, provided with the attitude of the speakers toward the information, the hearers may better judge for themselves the truth-value of the information. Therefore, I argue that using epistemic markers may allow Quechua speakers to convey information and messages as honestly as possible and may be related to the important place of honesty in the Quechua culture. Furthermore, use of the calques presented above in Spanish for the Quechua epistemic system may allow Quechua speakers to also convey the same epistemic

meanings while speaking in Spanish. Provided with information colored with epistemic meaning, hearers may more successfully grasp the truth of the information. Also, it is possible that Spanish speech lacking the Quechua epistemic calques, such as standard Peruvian Spanish, may be interpreted by Quechua speakers as less honest or withholding.

During the Language Attitudes interview of one participant, the participant made obvious references to his telling the truth. Upon being asked which language he preferred, this participant responded:

(116) *Ah, más idioma quechua porque a como aquí Cusco, en Peru más habla quechua,* ***correcto****, sí.*

'Ah (I prefer) the Quechua language more because here in Cuzco, Peru one speaks Quechua more, correct.'

In (116), we may also note the use of the *sí* calque. Upon then being asked which language he used more often daily, this same participant responded:

(117) *Más di a diario usamos aquí en Cusco, casi igual quechua y castellano,* ***sin mentir****.*

'Here in Cuzco, we use more daily, almost equally Quechua and Spanish, without lying.'

In (117), this participant used the voiceless fricative [r] calque on the final [r] of *mentir*, 'to lie'. Upon being asked whether he could read in Quechua, this same participant responded:

(118) *Yo leo también quechua,* ***correcto****, cualquiera libro.*

'I also read Quechua, correct, any book.'

Therefore, I have presented a case for the Quechua epistemic system's being related to the Quechua worldview. Perhaps by employing the Quechua epistemic suffixes and verb tenses as well as the Spanish calques of these, the Quechua-speaking descendants of the Incan Empire may better obey the wise teaching of their ancestors, *Ama suwa, ama llulla, ama qhella*.

5.8. Summary

In summary, throughout the first portion of this chapter, I described three methods that I used to measure the influence of Quechua in my participants' Spanish speech, compared these three methods, discussed the limitations of these methods, and found Quechua to Spanish cross-linguistic influence to occur in my participants' speech as measured by these three different methods. Throughout the middle portion of this chapter, I described 31 different phonetic, morphosyntactic, and calque cross-linguistic features found in the speech of my participants and examined the specific case of the cross-linguistic influence of the Quechua epistemic system on the Spanish spoken by my participants. In the last portion of this chapter, I examined a possible connection between the use of the Quechua epistemics and Spanish calques of these and the Quechua worldview.

In regard to the current debate about the characterization of child SLA, as I have found cross-linguistic influence to operate in the Spanish of my native Quechua-speaking participants, the majority of whom acquired Spanish as a second language during their childhood and early adolescence, these data appear to support a model of child SLA in which the final product is not the L2 itself but instead a 'Steady State ILG'. In other words, rather than achieving the acquisition of standard Peruvian Spanish, my participants appear to achieve the acquisition of a 'Steady State Interlanguage Grammar' for Spanish. Furthermore, these data seem to support a model of child SLA in which the L1 plays a significant role in the acquisition of the L2. Therefore, my data might support either White's (2000) first, third, or fifth models of adult SLA as applying in the case of child SLA, namely her 'Full transfer/partial (or no) access', 'Full transfer/full access', and 'Partial transfer/partial access'. Furthermore, it appears that these data do not support Dulay and Burt's (1974a, 1974b, and 1975) L1 = L2 Hypothesis that child second

language acquisition is identical to child first language acquisition. Finally, these data could support the possibility that child SLA = adult SLA. In other words, as my participants do not achieve the target, standard Peruvian Spanish, the way in which they acquired their Spanish might not be fundamentally different from the way in which adults acquire second languages.

The findings presented in the following chapter regarding the sociolinguistic situation of my study participants and the possible effects of social, extralinguistic factors on the cross-linguistic influence demonstrated by my participants must be taken into account in order to best explain the SLA of my participants.

6. Results: Research Goal 3

As mentioned above, my third research goal, motivated by sociolinguistic findings, is to investigate whether demographic characteristics, social network characteristics, and the language attitudes of my study participants correlate with their production of phonological, morphosyntactic, and calque cross-linguistic features discussed in the previous chapter. An important focus of sociolinguistic approaches to the study of cross-linguistic influence is the investigation of extralinguistic factors that may influence second language acquisition.

By carrying out participant observation and ethnography of communication among my participants, I was able to gain insight into the relevance of a variety of social factors in the eyes of my participants. Specifically, in this chapter, I examine relationships and correlations among both categorical and quantitative social factors and my participants' production of Quechua to Spanish cross-linguistic influence features.

6.1. Presentation of Results

In the previous chapter, I discussed three methods used to quantify the presence of the 31 different Quechua to Spanish cross-linguistic influence features in the speech of the 70 participants with whom Language Attitudes Interviews were carried out, the (1) Total Cross-Linguistic Feature Score, (2) Calque-Weighted Total Cross-Linguistic Feature Score, and (3) Implicational-Weighted Total Cross-Linguistic Feature Score. Following my presentation of these three measurement methods, I compared these methods and discussed some common limitations among these three methods.

I supported my use of the Total CLF Score based on the facts that I found a general implicational trend in my data (the Guttman procedure), and that I judged the internal consistency of my Total CLF Score to be moderately reliable (Reliability analysis using Cronbach's alpha). Therefore, I concluded that the Total CLF Score is an adequate measure of the Quechua to Spanish influence present in the speech of my subset of 70 participants. Further evidence involving the Total CLF Score presented within this chapter will also support the robustness of the Total CLF Score.

Within this chapter, I present results obtained through two methods: linear regression with one predictor and Oneway ANOVA. I argue that my results produced here through the methods of linear regression and Oneway ANOVA sufficiently respond to my third research question, described above. A goal of future research will be to carryout an analysis of multiple regression on these data. Furthermore, future research will seek to investigate the possible problem of colinearity among the social factors I investigate here. For example, it is likely that my 'Age', 'Total Years in Cuzco', and 'Cuzco Arrival Age' social factors might be interrelated.

I use linear regression to investigate the correlations among social factors that may be represented quantitatively ('Age', 'SLA Age', 'Total Years of Schooling', 'Cuzco Arrival Age', 'Total Years in Cuzco', and 'Quechua Value Score') and my participants' Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores. Furthermore, I divide my Total CLF Score for each participant into a variety of sub-scores and then investigate the correlations among my quantitative social factors and these sub-scores.

I use Oneway ANOVA tests at alpha = 0.05 in order to investigate the relationships among social factors that may be represented categorically, ('Gender', 'Language of Education', 'Monolingual Spanish-speaking Friends in the Past', Monolingual Spanish-speaking

Acquaintances in the Past', 'Monolingual Spanish-Speaking Friends at the Time of the Study', and 'Monolingual Spanish-speaking Acquaintances at the Time of the Study'), and my participants' Total CLF Scores, Calque-Weighted Total CLF Scores, and Implicational-Weighted Total CLF Scores. As for my quantitative social factors, I also divide my Total CLF Score for each participant into a variety of sub-scores and then investigate the relationships among my categorical social factors and these sub-scores.

Specifically, I divide my participants' Total CLF Scores into two sets of sub-scores. The first set ('Set 1') consists of the following sub-scores: (1) 'Phonetic CLF Score', (2) 'Morphosyntactic CLF Score', and (3) 'Total Calque CLF Score'. The second set ('Set 2') divides the first set's 'Morphosyntactic CLF Score' and 'Total Calque CLF Score' sub-categories into further sub-scores. 'Set 2' consists of the following sub-scores: (1) 'Phonetic CLF Score' (identical to that in the first set), (2) 'Verb CLF Score', (3) 'Calque CLF Score', (4) 'Agreement CLF Score', (5) 'Syntactic CLF Score', and (6) 'Epistemic Calque CLF Score'. In Table 25 below, I display my classification of the 31 features into the 'Set 1' and 'Set 2' sub-categories:

Table 25. Classification of 31 CLF features into Set 1 and Set 2 Sub-Scores

Set 1 Sub-Scores		31 Cross-Linguistic Features	Set 2 Sub-Scores
Phonetic CLF Score	1	Vowel Raising	Phonetic CLF Score
	2	Non-Standard Realization of /f/	
	3	Stress Shift	
	4	Consonant Cluster Simplification	
	5	Metathesis	
	6	Diphthong Simplification	
	7	Non-Standard Palatalization	
	8	Non-Standard Realization of /b/, /d/, or /g/	
Morphosyntactic CLF Score	9	Non-Standard Gerund Use	Verb CLF Score
	10	Avoiding the Subjunctive	
	11	Non-Standard Verb Conjugation	
	12	Non-Standard Number Agreement	Agreement CLF Score
	13	Non-Standard Gender Agreement	
	14	Non-Standard Person Agreement	
	15	Non-Standard Article Agreement	
	16	Non-Standard Preposition Agreement	
	17	'*hay veces*' Preposition Avoidance	
	18	Non-Standard Object Pronoun Agreement	
	19	Double Possessive	Syntactic CLF Score
	20	Non-Standard Word Order	
Total Calque CLF Score	21	Diminutive Calque	Calque CLF Score
	22	'*no más*' Calque	
	23	'*ya*' Calque	
	24	'*pues*' Calque	Epistemic Calque CLF Score
	25	'*dice*' Calque	
	26	'*sí*' Calque	
	27	'*así*' Calque	
	28	Elongated /s/ Calque	
	29	'*siempre*' Calque	
	30	Voiceless [r] Calque	
	31	Pluralization Calque	

As I have found my Total CLF Score to be an adequate summary measure of the Quechua to Spanish influence present in the speech of my subset of 70 participants, my investigation of the correlation of social factors with my participants' Total CLF Score is justified. However, I felt it would be more informative to also investigate the correlations and relationships of social factors with the various sub-scores of the Total CLF Score, as represented by 'Set 1' and 'Set 2'. I proceeded in this fashion because I considered the possibility that, even though my Total CLF Score may be an adequate summary score that indicates the overall level of Quechua influence present in my participants' Spanish, different relationships and correlations

could emerge while investigating the correlations of subsets of my 31 features. Also, as I have found my Total CLF Score to be an adequate measure for my purposes, my dividing the Total CLF Score into sub-scores, which I then tested, is justified.

It turns out that in the vast majority of cases, my sub-scores manifest the same trend as that of my Total CLF Score. Thus, this is further evidence for the robustness of my Total CLF Score. While correlating my quantitative social factors with the Total CLF Score, Set 1 and Set 2, in the vast majority of cases, I found positive correlations. Also, while using Oneway ANOVA to investigate relationships among my categorical social factors and the Total CLF Score, Set 1 and Set 2, I found the sub-categories to show the same trend as that of my Total CLF Score. I describe my results for each social factor in detail in later sections of this chapter.

Generally, I found stronger correlations with my Total CLF Score and the social factors than I did with either the Calque-Weighted Total CLF Score or the Implicational-Weighted Total CLF Score and the social factors. The correlations of the Calque-Weighted Total CLF Score and the Implicational-Weighted Total CLF Score with the social factors never contradict the correlations of the Total CLF Score with the social factors. Simply, the correlations with the Calque-Weighted Total CLF Score and the Implicational-Weighted Total CLF Score are generally not as strong as the correlations with the Total CLF Score and the social factors.

In three of the six correlations of the Total CLF Score, Calque-Weighted Total CLF Score and Implicational-Weighted Total CLF Score with each of my six quantitative social factors, I found the strongest correlations with the Total CLF Score. Also, in two of these six correlations, I found the Total CLF Score to produce the second strongest correlations. In one of these six correlations, I found the correlation of the Total CLF Score to equal the correlation of the Calque-Weighted Total CLF Score, with both indicating a weaker correlation than that of the

Implicational-Weighted Total CLF Score. For the sake of comparison, I present the correlations of all three measures, the Total CLF Score, Calque-Weighted Total CLF Score, and Implicational-Weighted Total CLF Score, with each of the social factors.

Throughout this chapter, I present all of the positive and negative values that I found for *r*, the 'Coefficient of Correlation'. However, I discuss only those results that indicate 'moderate' and 'strong' positive and negative correlations. None of my results indicated 'very strong' correlations. Following generally accepted statistical practice, I interpret the 'Coefficient of Correlation', *r*, in the following way:

Table 26. Guidelines for interpreting *r*, the Coefficient of Correlation

Positive Correlations	Negative Correlations	Interpretations
$0.0 < r < 0.3$	$-0.3 < r < 0.0$	weak correlation
$0.3 \leq r < 0.6$	$-0.6 < r \leq -0.3$	moderate correlation
$0.6 \leq r < 0.8$	$-0.8 < r \leq -0.6$	strong correlation
$r \geq 0.8$	$r \leq -0.8$	very strong correlation

6.2. Demographic Characteristics

In this section, I present the results of my investigation of correlations and relationships of my participants' Total CLF Score, Set 1 and Set 2 sub-categories of the Total CLF Score, Calque-Weighted Total CLF Score, and Implicational-Weighted Total CLF Score with both categorical and quantitative demographic social factors.

6.2.1. Gender

The first of the categorical demographic social factors investigated here is gender. All of my participants from the CdC are male and all of my participants from CAITH are female.

Oneway ANOVA tests at alpha = 0.05, comparing the means for the males and females on each of the measures, yielded insignificant results in all cases. Thus, the males and females were not found to have significantly different levels of Quechua influence in their Spanish speech. Below, in Table 27, I present the results of these Oneway ANOVA tests.

Table 27. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for males and females

Total CLF	(p = 0.3028)	not significant
Implicational-Weighted Total CLF	(p = 0.8272)	not significant
Calque-Weighted Total CLF	(p = 0.2776)	not significant
Phonetic CLF	(p = 0.1336)	not significant
Morphosyntactic CLF	(p = 0.0761)	not significant
Total Calque CLF	(p = 0.2760)	not significant
Verb CLF	(p = 0.4543)	not significant
Calque CLF	(p = 0.1666)	not significant
Agreement CLF	(p = 0.0733)	not significant
Syntactic CLF	(p = 0.4946)	not significant
Epistemic Calque CLF	(p = 0.5469)	not significant

6.2.2. Age

The first of the quantitative demographic social factors investigated here is age. My participants ranged in age (as of 2003) from 11 years old to 58 years old. A total of 55 participants out of 70 were less than 25 years old at the time of participation in my study.

In Table 28 below, I present a variety of correlations. In the 'Ungrouped Population' column, I present correlations found through the results of regression analysis carried out using the ages of the entire subset of 70 participants. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups of the same age (in years), found the average CLF Scores for these groups, and carried out regression analysis on these average scores. Thus, the 'Averages for Grouped Population' column will

indicate stronger correlations than those in the 'Ungrouped Population' column, as the average scores for the age groups vary less than do the scores for the total population.

Table 28. Participants' age correlated with Quechua cross-linguistic influence

	Ungrouped Population	Averages for Grouped Population
Total CLF	(r = 0.36) + moderate	(r = 0.52) + moderate
Implicational-Weighted Total CLF	(r = 0.29)	---
Calque-Weighted Total CLF	(r = 0.39) + moderate	---
Phonetic CLF	(r = -0.08)	(r = -0.19)
Morphosyntactic CLF	(r = 0.34) + moderate	(r = 0.47) + moderate
Total Calque CLF	(r = 0.41) + moderate	(r = 0.63) + strong
Verb CLF	(r = 0.14)	(r = 0.30) + moderate
Calque CLF	(r = 0.27)	(r = 0.39) + moderate
Agreement CLF	(r = 0.35) + moderate	(r = 0.49) + moderate
Syntactic CLF	(r = 0.09)	(r = 0.02)
Epistemic Calque CLF	(r = 0.37) + moderate	(r = 0.60) + strong

In Table 28, I mark 'moderate' and 'strong' positive correlations between the various CLF scores and my participants' age. I have placed dashed lines in the 'Averages for Grouped Population' column for the Implicational-Weighted Total CLF Score and Calque-Weighted Total CLF Score because I did not perform regression analysis using the average Calque-Weighted Total CLF and Implicational-Weighted Total CLF Scores for the age groups. I list the *r* for weak correlations; however, I do not mark cells with '+/- weak'. As I may not make any reliable claims based on weak correlations and in order to avoid cluttering the table, I do not mark '+/- weak'.

In Table 28, we may observe that there is a moderate positive correlation between age and participants' Total CLF Score, in both the 'Ungrouped Population' and 'Averages for Grouped Population' columns. Also, we may observe that the Calque-Weighted Total CLF Score and a number of the sub-scores of the Total CLF Score in both Set 1 and Set 2 show moderate or strong positive correlations with participants' age. Thus, in general, those participants who were older also happened to have higher CLF Scores.

Therefore, in general, older participants exhibited more Quechua influence in their Spanish than did younger participants. I hypothesize that this trend may reflect changes in the schooling practices of rural Cuzco. Bilingual education has been slowly on the rise in Peru and schoolteachers who do not already speak Quechua are increasingly encouraged to learn Quechua as a second language. Another possibility is that the communities where the older participants came from may have experienced less Spanish influence or may have been home to fewer Spanish speakers while these older participants were growing up.

6.2.3. SLA Age

The second quantitative demographic social factor investigated here is 'SLA Age', or the age at which my participants began their acquisition of Spanish. My participants claimed that their SLA Ages ranged from 0 to 18, with 54 participants out of 70 having an SLA Age of 13 or younger.

As for the case of age above, in Table 29 below, I have listed two columns, one for the 'Ungrouped Population' and one for the 'Averages for Grouped Population'. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups of the same SLA Age (in years), found the average CLF Scores for these groups, and carried out regression analysis on these average scores.

Table 29. Participants' SLA Age correlated with Quechua cross-linguistic influence

	Ungrouped Population	Averages for Grouped Population
Total CLF	(r = 0.31) + moderate	(r = 0.62) + strong
Implicational-Weighted Total CLF	(r = 0.30) + moderate	---------
Calque-Weighted Total CLF	(r = 0.30) + moderate	---------
Phonetic CLF	(r = 0.22)	(r = 0.42) + moderate
Morphosyntactic CLF	(r = 0.22)	(r = 0.41) + moderate
Total Calque CLF	(r = 0.27)	(r = 0.54) + moderate
Verb CLF	(r = 0.21)	(r = 0.50) + moderate
Calque CLF	(r = 0.20)	(r = 0.56) + moderate
Agreement CLF	(r = 0.12)	(r = 0.16)
Syntactic CLF	(r = 0.26)	(r = 0.42) + moderate
Epistemic Calque CLF	(r = 0.23)	(r = 0.39) + moderate

In Table 29, we may observe that regression analysis resulted in moderate positive correlations between the Total CLF, Implicational-Weighted Total CLF, and Calque-Weighted Total CLF Scores for the 'Ungrouped Population'. However, the Set 1 and Set 2 correlations were all weak for the 'Ungrouped Population'. In the 'Averages for Grouped Population' column, as the data correlated varies less, we find many positive moderate correlations and a positive strong correlation for the Total CLF Score. Thus, in general, participants with an older SLA Age also exhibit a greater level of Quechua influence in their Spanish. In other words, those participants who began their acquisition of Spanish at an older age happen to exhibit more Quechua influence in their Spanish than do the participants who began their acquisition of Spanish at a younger age. This trend supports the 'Critical Period Hypothesis', described in the Literature Review.

6.2.4. Language of Primary Education

The second categorical demographic social factor investigated here is 'Language of Education'. This factor refers to the language(s) that my participants' primary school teachers used while teaching my participants during their primary school years. Generally, my

participants entered primary school at the ages of 5, 6, or 7 and finished primary school around the ages of 10 to 13. A total of 10 of my participants claimed that their primary school teachers taught them by means of Quechua. A total of 32 of my participants claimed that their primary school teachers taught them via both Quechua and Spanish. A total of 28 of my participants claimed that their primary school teachers taught them through Spanish.

In his work, "Foreign Language Learning in a Multilingual Setting: The Predictability of 'the Mother Tongue Effect", Sammy Chumbow (1984:290) finds sociolinguistic features to play a major role in determining the degree of cross-linguistic influence a particular language may exert. Among a variety of sociolinguistic features presented by Chumbow and discussed above in my Literature Review, he identifies the question of whether or not a language is used as a means of instruction in the subject's schooling as playing a major role in determining the degree of cross-linguistic influence that a language may exert.

I carried out Oneway ANOVA tests at alpha = 0.05 in order to compare the mean CLF Scores for those participants who were taught by means of Quechua, Both (Quechua and Spanish), and Spanish in primary school. I found the Total Calque CLF and the Epistemic Calque CLF Scores to evince significant differences. As the Total Calque CLF Score includes the Epistemic Calque CLF Score, and since the ANOVA using the Calque CLF Score did not produce any significant differences, we may pinpoint the Epistemic Calques as being the source of the significant difference. In Table 30 below, I present the results of these Oneway ANOVA tests.

Table 30. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for those who were taught by means of Quechua, Both, and Spanish

Total CLF	($p = 0.1604$)	not significant
Implicational-Weighted Total CLF	($p = 0.3225$)	not significant
Calque-Weighted Total CLF	($p = 0.0772$)	not significant
Phonetic CLF	($p = 0.6733$)	not significant
Morphosyntactic CLF	($p = 0.6628$)	not significant
Total Calque CLF	($p = 0.0204$)	significant
Verb CLF	($p = 0.7571$)	not significant
Calque CLF	($p = 0.2476$)	not significant
Agreement CLF	($p = 0.6846$)	not significant
Syntactic CLF	($p = 0.0982$)	not significant
Epistemic Calque CLF	($p = 0.0333$)	significant

Further investigation revealed that the results for both the Total Calque CLF Score and the Epistemic Calque CLF Score indicate that there are significant differences between the levels of Quechua influence in the speech of the three groups, with those who were taught in Quechua having the highest CLF Scores, which were significantly different than the CLF Scores of those who were taught by means of both Quechua and Spanish, who had lower CLF Scores, which were significantly different than the CLF Scores of those who were taught through the means of Spanish, who had the lowest CLF Scores.

Therefore, in general, participants who were taught by means of Quechua in primary school use the most Epistemic Calques, followed by those who were taught by means of both Quechua and Spanish, followed by those who were taught by means of Spanish. Perhaps the higher CLF Scores of the students who were taught by means of Quechua are due to less exposure to standard Spanish. Also, perhaps the generally high CLF Scores of the students who were taught by means of both Quechua and Spanish may have resulted from a Quechua-influenced style of Spanish having been reinforced for my participants by their school teachers. Also, perhaps teaching by means of both Quechua and Spanish might encourage higher mutual levels of cross-linguistic influence, as both languages are repeatedly accessed.

6.2.5. Total Years of Schooling

The third quantitative demographic social factor investigated here is 'Total Years of Schooling'. This refers to the total number of years that my participants attended schools, including primary, secondary, and post-secondary education. The range of 'Total Years of Schooling' for my participants is 0 to 18 years, with 50 out of 70 participants having gone to school a total of 10 or less years.

As for the cases of Age and SLA Age above, in Table 31 below, I have listed two columns, named 'Ungrouped Population' and 'Averages for Grouped Population'. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups with the same Total Years of Schooling (in years), found the average CLF Scores for these groups, and carried out regression analysis on these average scores. Also, I have two additional columns, named 'Ungrouped Population Without Outlier' and 'Averages for Grouped Population Without Outlier'. In Figure 7 below, I present a scatter plot of my participants' Total Years of Schooling versus their Total CLF Score, for the 'Ungrouped Population'.

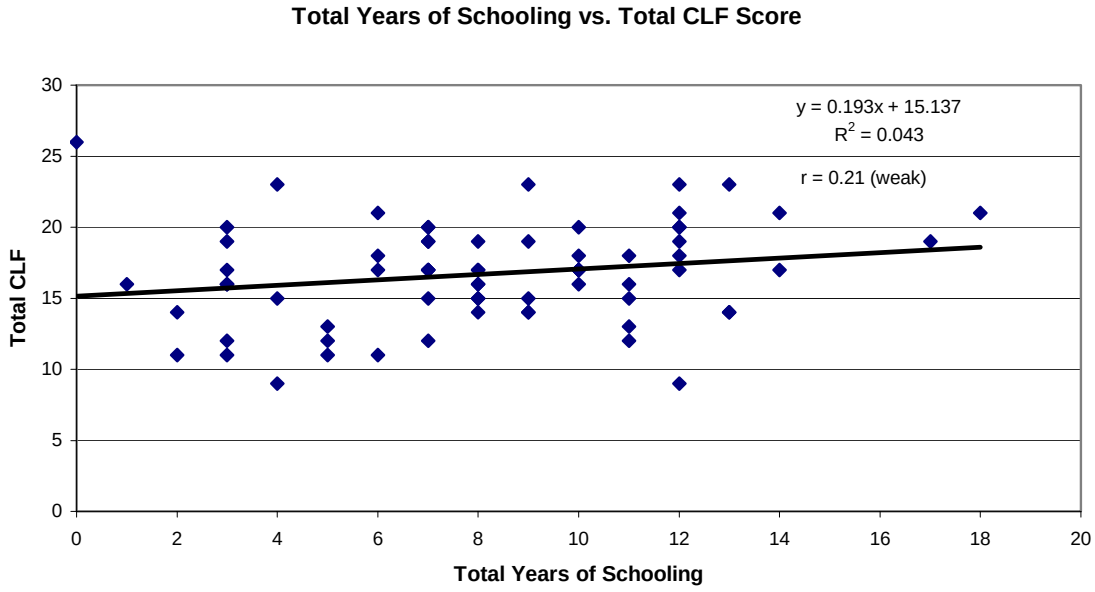


Figure 8. Scatter plot of Participants' Total Years of Schooling vs. Total CLF Score

In Figure 8, we may observe that the one participant out of 70 who was plotted at (0, 26) (no years of schooling, Total CLF Score of 26) appears to be an outlier. Also, the equation for the regression line, the coefficient of determination, r^2, and the coefficient of correlation, r, (here $r = 0.21$) appear in Figure 8, showing that there is a weak positive correlation. I then tried removing the participant at (0, 26) and created the following scatter plot in Figure 9.

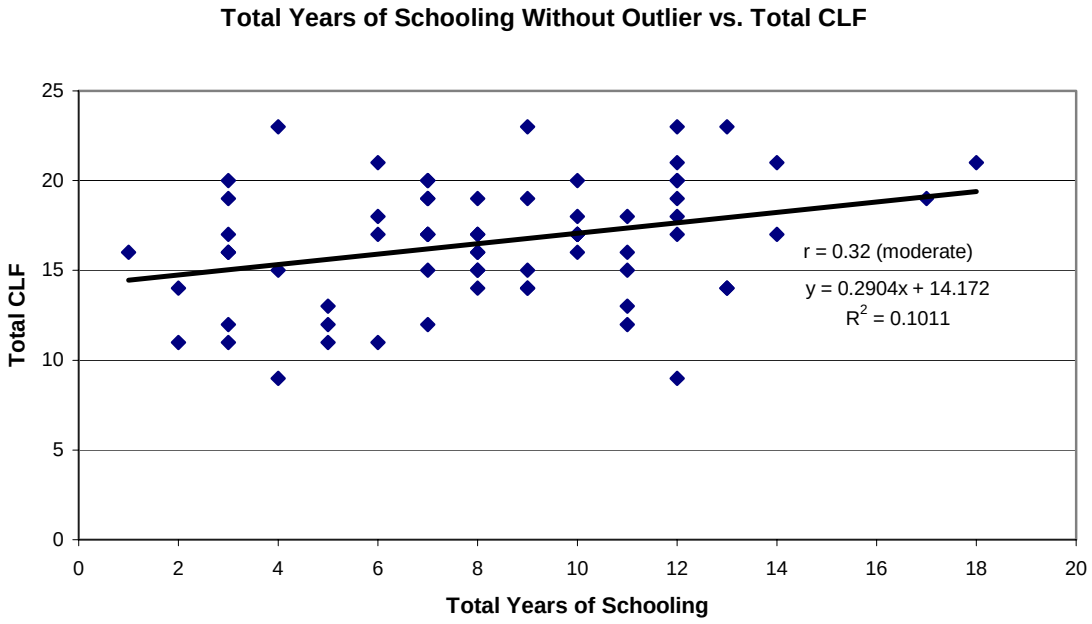


Figure 9. Scatter Plot of Participants' Total Years of Schooling vs. Total CLF Score without the outlier

Upon removing the outlier at (0,26), I find a moderate positive correlation, with $r = 0.32$. Thus, in the 'Ungrouped Population Without Outlier' column in Table 31 below, I have placed '+ moderate'. While including the outlier, only the Agreement CLF shows a moderate positive correlation in both the 'Ungrouped Population' and 'Averages for Grouped Population' columns. Without the outlier, in the 'Ungrouped Population Without Outlier' column, we find moderate positive correlations for the Total CLF, Morphosyntactic CLF, and Agreement CLF Scores. In the 'Averages for Grouped Population Without Outlier' column, we find a variety of both strong and moderate positive correlations. Thus in general, participants who have more years of education also tend to have higher CLF Scores.

Table 31. Participants' Total Years of Schooling correlated with Quechua cross-linguistic influence

	Ungrouped Population	Ungrouped Population Without Outlier	Averages for Grouped Population	Averages for Grouped Population Without Outlier
Total CLF	(r = 0.21)	(r = 0.32) + moderate	(r = 0.21)	(r = 0.76) + strong
Implicational-Weighted Total CLF	(r = 0.15)	---	---	---
Calque-Weighted Total CLF	(r = 0.18)	---	---	---
Phonetic CLF	(r = 0.06)	(r = 0.13)	(r = 0.18)	(r = 0.53) + moderate
Morphosyntactic CLF	(r = 0.28)	(r = 0.38) + moderate	(r = 0.27)	(r = 0.72) + strong
Total Calque CLF	(r = 0.11)	(r = 0.18)	(r = 0.08)	(r = 0.49) + moderate
Verb CLF	(r = 0.08)	(r = 0.14)	(r = 0.14)	(r = 0.45) + moderate
Calque CLF	(r = 0.14)	(r = 0.21)	(r = 0.16)	(r = 0.62) + strong
Agreement CLF	(r = 0.34) + moderate	(r = 0.41) + moderate	(r = 0.38) + moderate	(r = 0.66) + strong
Syntactic CLF	(r = -0.02)	(r = 0.07)	(r = -0.23)	(r = 0.15)
Epistemic Calque CLF	(r = 0.06)	(r = 0.10)	(r = 0.00)	(r = 0.25)

In other words, participants who have gone to school for a longer period of time also tend to display more Quechua influence in their Spanish speech than those participants who went to school for a shorter total period of time. This finding is counter-intuitive, as often school is thought to promote the standardization of language. I find two possible explanations for this trend. The first possible explanation I offer here is that, as 10 participants claimed to receive their primary education through the means of Quechua, 32 by means of both Quechua and Spanish, and only 28 by means of Spanish alone, a Quechua-influenced Spanish may have been the variety of Spanish used while teaching many of my 70 participants. Also, those participants who received their primary education by means of Quechua may have not had as much exposure to Spanish as those who received their educations by means of both Quechua and Spanish or Spanish alone. Thus, the elements of Quechua influence, my 31 features, may have been reinforced for my participants while in school.

However, in general, in Cuzco primary schools where Quechua is used as a language of instruction, primarily teachers at the lowest levels use Quechua. As students progress through primary school, Quechua is generally phased out as a language of instruction, resulting in Spanish-only or Spanish-dominant upper-level primary classes. Also, the vast majority of my participants were taught by means of Spanish alone while attending high school and university classes. At the university level in Cuzco, often students may study Quechua as a foreign language. Participants who had attended only primary school generally attended school for a total of approximately 7 or 8 years. Also, many of my participants attended their high school and university classes after having migrated to the city of Cuzco, where many inhabitants speak standard Peruvian Spanish and where it would have been likely for my participants to be taught by native Spanish speakers. We may observe in Figures 7 and 8 that those participants who attended school for a total of more than 8 years continue to have increasingly high CLF Scores. Thus, I offer another possible explanation, namely that my participants may have continued to exhibit increasingly high levels of Quechua influence in their Spanish at the high school and university levels in order to distinguish themselves from their native Spanish-speaking peers and thus form a variety of in-group speech.

6.3. Social Network Characteristics

In this section, I present the results of my investigation of correlations and relationships of my participants' Total CLF Score, Set 1 and Set 2 sub-scores of the Total CLF Score, Calque-Weighted Total CLF Score, and Implicational-Weighted Total CLF Score with both categorical and quantitative social network factors. In this section, I present results for a subset of 69

participants. One of the participants who carried out a Language Attitudes interview with me did not carry out a social network interview with me.

Lesley and James Milroy, who are credited with the development of the use of social network investigations in sociolinguistics, have claimed that through the study of social networks, we may come to understand the "community-level mechanisms that underlie processes of language maintenance" (Milroy & Milroy, 1992:6).

6.3.1. Cuzco Arrival Age

The first of the quantitative social network factors investigated here is 'Cuzco Arrival Age'. The Cuzco Arrival Ages of my participants range from 0 to 21 years, with 40 of my subset of 69 participants having migrated to Cuzco at the age of 13 or younger. I have classified this factor as a social network factor, as migrating to Cuzco entails a change in social network. In Cuzco, my participants were exposed to a greater number of native Spanish speakers.

In Table 32 below, I present a variety of correlations. In the 'Ungrouped Population' column, I present correlations found through the results of regression analysis carried out using the Cuzco Arrival Ages of the entire subset of 69 participants. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups of the same Cuzco Arrival Age (in years), found the average CLF Scores for these groups, and carried out regression analysis on these average scores.

Table 32. Participants' Cuzco Arrival Age correlated with Quechua cross-linguistic influence

	Ungrouped Population	Averages for Grouped Population
Total CLF	(r = 0.34) + moderate	(r = 0.72) + strong
Implicational-Weighted Total CLF	(r = 0.29)	---
Calque-Weighted Total CLF	(r = 0.32) + moderate	---
Phonetic CLF	(r = 0.16)	(r = 0.42) + moderate
Morphosyntactic CLF	(r = 0.34) + moderate	(r = 0.66) + strong
Total Calque CLF	(r = 0.25)	(r = 0.52) + moderate
Verb CLF	(r = 0.08)	(r = 0.24)
Calque CLF	(r = 0.09)	(r = 0.13)
Agreement CLF	(r = 0.34) + moderate	(r = 0.61) + strong
Syntactic CLF	(r = 0.27)	(r = 0.36) + moderate
Epistemic Calque CLF	(r = 0.27)	(r = 0.47) + moderate

In Table 32, we find a variety of moderate and a few strong positive correlations. Thus, in general, participants who migrated to Cuzco at an older age also exhibit a higher level of Quechua influence in their Spanish. This may possibly be explained by the fact that generally, the participants come from communities where there are fewer native Spanish speakers and less native speakers of standard Peruvian Spanish than in Cuzco. Therefore, generally, the earlier these participants were exposed to their post-migratory social network in Cuzco, the less Quechua influence they exhibit in their Spanish.

6.3.2. Total Years in Cuzco

The second of the quantitative social network factors investigated here is 'Total Years in Cuzco'. This refers to the total number of years that my participants have spent living in Cuzco. The 'Total Years in Cuzco' for my participants ranges from 0 to 25, with 59 out of my subset of 70 participants having lived in Cuzco less than 10 years. I have classified this factor as a social network factor, as the total years spent living in Cuzco after (generally) migrating to Cuzco may represent the amount of time during which my participants were exposed to their social networks in Cuzco.

In Table 33 below, the results yield only a few significant correlations. I found no moderate or stronger correlations in the 'Ungrouped Population' column, which represents the results of regression analysis carried out using the Total Years in Cuzco of the entire subset of 70 participants. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups of the same number of years spent living in Cuzco, found the average CLF Scores for these groups, and carried out a regression analysis on these average scores.

In the 'Averages for Grouped Population' column, we may find two moderate positive correlations for the Morphosyntactic CLF and the Agreement CLF Scores and one moderate negative correlation for the Syntactic CLF. As the Ageement CLF Score is an element of the Morphosyntactic CLF Score, the moderate positive correlation found for the Morphosyntactic CLF Score primarily results from the Agreement CLF Score.

Table 33. Participants' Total Years in Cuzco correlated with Quechua cross-linguistic influence

	Ungrouped Population	Averages for Grouped Population
Total CLF	(r = 0.04)	(r = 0.15)
Implicational-Weighted Total CLF	(r = 0.05)	---------
Calque-Weighted Total CLF	(r = 0.04)	---------
Phonetic CLF	(r = -0.12)	(r = -0.12)
Morphosyntactic CLF	(r = 0.11)	(r = 0.33) + moderate
Total Calque CLF	(r = 0.04)	(r = 0.08)
Verb CLF	(r = 0.03)	(r = 0.16)
Calque CLF	(r = 0.04)	(r = 0.00)
Agreement CLF	(r = 0.16)	(r = 0.49) + moderate
Syntactic CLF	(r = -0.11)	(r = -0.42) - moderate
Epistemic Calque CLF	(r = 0.02)	(r = 0.11)

Thus, generally, the greater the number of years my participants spent living in Cuzco, the greater their Agreement CLF Score, and the greater the number of years my participants spent living in Cuzco, the lower their Syntactic CLF score. Thus, this represents a split. As my participants were likely exposed to social networks with a greater number of native Spanish

speakers while living in Cuzco, it seems logical that their Syntactic CLF Score should decrease along with an increase in the number of years spent living in Cuzco, indicating convergence of my participants' Spanish toward standard Peruvian Spanish. However, how might we explain the increased non-standard agreement along with my participants' increased number of years spent living in Cuzco? I suggest that perhaps, my participants may use non-standard agreement in order to identify themselves as Quechua speakers. In other words, these participants may be using non-standard agreement in their Spanish in order to create an in-group form of Spanish.

6.3.3. Monolingual Spanish-speaking Friends in the Past

In this section and in the following three sections, I examine four similar categorical social network factors. In this section, I investigate whether my participants had monolingual Spanish-speaking friends in the past and the relationship of this fact to the level of Quechua influence in my participants' speech. A total of 50 of my participants claimed that they had not had monolingual Spanish-speaking friends in the past while a total of 19 participants claimed that they had had monolingual Spanish-speaking friends in the past. McLaughlin (1978b) recognizes the importance of one's social network on second language acquisition and has claimed that there is no influence from the native language in child second language acquisition unless the child is isolated from peers who speak the target language natively.

Oneway ANOVA tests at alpha = 0.05, comparing the mean CLF Scores for those who had had monolingual Spanish-speaking friends in the past with those who had not yielded insignificant results in all cases. Thus, these results do not support McLaughlin's (1978) claim above. I present the results of these Oneway ANOVA tests in Table 34 below. Thus, I did not find the level of Quechua influence present in the speech of those participants who had not had

monolingual Spanish-speaking friends in the past to significantly differ from the level of Quechua influence present in the speech of those participants who had had monolingual Spanish-speaking friends in the past.

Table 34. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for those who had had monolingual Spanish-speaking friends in the past with those who had not

Total CLF	(p = 0.5809)	not significant
Implicational-Weighted Total CLF	(p = 0.5630)	not significant
Calque-Weighted Total CLF	(p = 0.5791)	not significant
Phonetic CLF	(p = 0.3663)	not significant
Morphosyntactic CLF	(p = 0.9318)	not significant
Total Calque CLF	(p = 0.6115)	not significant
Verb CLF	(p = 0.5491)	not significant
Calque CLF	(p = 0.9855)	not significant
Agreement CLF	(p = 0.6093)	not significant
Syntactic CLF	(p = 0.3013)	not significant
Epistemic Calque CLF	(p = 0.5174)	not significant

6.3.4. Monolingual Spanish-speaking Acquaintances in the Past

The second categorical social network factor investigated here examines whether my participants had had monolingual Spanish-speaking acquaintances in the past and the relationship of this fact to the level of Quechua influence in my participants' speech. A total of 33 of my participants claimed that they had not had monolingual Spanish-speaking acquaintances in the past while a total of 36 participants claimed that they had had monolingual Spanish-speaking acquaintances in the past. Thus, this data is split relatively equally between those who had and those who had not.

Oneway ANOVA tests at alpha = 0.05, comparing the mean CLF Scores for those who had had monolingual Spanish-speaking acquaintances in the past with those who had not yielded a few significant results. I present these results below in Table 35. I found significant

differences for my two groups of participants regarding their Morphosyntactic CLF Score and Agreement CLF Score, with those who had had monolingual Spanish-speaking acquaintances in the past having higher CLF Scores. As the Agreement CLF Score is an element of the Morphosyntactic CLF Score, the significant difference found for the Morphosyntactic CLF Score primarily results from the Agreement CLF Score.

Table 35. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for those who had had monolingual Spanish-speaking acquaintances in the past with those who had not

Total CLF	($p = 0.0570$)	not significant
Implicational-Weighted Total CLF	($p = 0.0966$)	not significant
Calque-Weighted Total CLF	($p = 0.0588$)	not significant
Phonetic CLF	($p = 0.8354$)	not significant
Morphosyntactic CLF	($p = 0.0491$)	significant
Total Calque CLF	($p = 0.0923$)	not significant
Verb CLF	($p = 0.8267$)	not significant
Calque CLF	($p = 0.2014$)	not significant
Agreement CLF	($p = 0.0106$)	significant
Syntactic CLF	($p = 0.3506$)	not significant
Epistemic Calque CLF	($p = 0.1549$)	not significant

Thus, I found my participants who had had monolingual Spanish-speaking acquaintances in the past to exhibit more non-standard agreement in their Spanish than those participants who had not. Similar to the results for my participants' 'Total Years in Cuzco', I hypothesize that perhaps, non-standard agreement may be used by my participants in order to identify themselves as Quechua speakers and distinguish themselves from native Spanish speakers. In other words, this is further evidence for the hypothesis that these participants may be using non-standard agreement in their Spanish in order to create an in-group variety of Spanish.

6.3.5. Monolingual Spanish-speaking Friends at the Time of the Study

In this section, I examine another similar categorical social network factor. Specifically, in this section, I investigate whether my participants had monolingual Spanish-speaking friends at the time when the social network investigation was carried out and the relationship of this fact to the level of Quechua influence in my participants' speech. A total of 13 of my participants claimed that they did not have monolingual Spanish-speaking friends at the time of the social network investigation while a total of 56 participants claimed that they did.

Oneway ANOVA tests at alpha = 0.05, comparing the mean CLF Scores for those who had monolingual Spanish-speaking friends at the time of the social network investigation with those who had not yielded insignificant results in all cases. I present these results in Table 36 below. Thus, I did not find the level of Quechua influence present in the speech of those participants who had monolingual Spanish-speaking friends at the time of the study to significantly differ from the level of Quechua influence present in the speech of those participants who had not.

Table 36. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for those who had monolingual Spanish-speaking friends at the time of the study with those who had not

Total CLF	(p = 0.9861)	not significant
Implicational-Weighted Total CLF	(p = 0.7643)	not significant
Calque-Weighted Total CLF	(p = 0.9208)	not significant
Phonetic CLF	(p = 0.6312)	not significant
Morphosyntactic CLF	(p = 0.9119)	not significant
Total Calque CLF	(p = 0.7557)	not significant
Verb CLF	(p = 0.9950)	not significant
Calque CLF	(p = 0.7590)	not significant
Agreement CLF	(p = 0.8944)	not significant
Syntactic CLF	(p = 0.9605)	not significant
Epistemic Calque CLF	(p = 0.5595)	not significant

6.3.6. Monolingual Spanish-speaking Acquaintances at the Time of the Study

The last categorical social network factor investigated here examines whether my participants had monolingual Spanish-speaking acquaintances at the time of the study and the relationship of this fact to the level of Quechua influence in my participants' speech. A total of 13 of my participants claimed that they did not have monolingual Spanish-speaking acquaintances at the time of the social network investigation while a total of 56 participants claimed that they did. Although the proportions, 13 and 56 out of 69, are identical to those found for the 'Monolingual Spanish-speaking Friends at the Time of the Study' social factor, these represent different sets of participants.

Oneway ANOVA tests at alpha = 0.05, comparing the mean CLF Scores for those who had monolingual Spanish-speaking acquaintances at the time of the study with those who had not yielded one significant result. I present the results of these Oneway ANOVA tests below in Table 37. I found a significant difference for these two groups of participants regarding their Phonetic CLF Score, with those who had monolingual Spanish-speaking acquaintances at the time of the study having lower Phonetic CLF Scores.

Table 37. Results of Oneway ANOVA comparing the mean Quechua cross-linguistic influence scores for those who had monolingual Spanish-speaking acquaintances at the time of the study with those who had not

Total CLF	(p = 0.6540)	not significant
Implicational-Weighted Total CLF	(p = 0.2847)	not significant
Calque-Weighted Total CLF	(p = 0.8941)	not significant
Phonetic CLF	(p = 0.0339)	significant
Morphosyntactic CLF	(p = 0.7731)	not significant
Total Calque CLF	(p = 0.6355)	not significant
Verb CLF	(p = 0.9950)	not significant
Calque CLF	(p = 0.3038)	not significant
Agreement CLF	(p = 0.9138)	not significant
Syntactic CLF	(p = 0.0752)	not significant
Epistemic Calque CLF	(p = 0.2220)	not significant

Thus, I found my participants who had monolingual Spanish-speaking acquaintances at the time of the study to exhibit less Quechua influence on their Spanish phonology than those participants who had not. It seems logical that those participants whose social networks included monolingual Spanish-speaking acquaintances should have more standard Spanish phonology, as their Spanish phonology may be converging toward the standard Peruvian Spanish phonology of their monolingual Spanish-speaking acquaintances.

6.4. Language Attitudes

As mentioned above, according to Thomason (2001), the influence of social factors is a major reason why exceptions have been found to all proposed linguistic constraints on language contact. The social factor found to be the most influential according to Thomason is speaker attitude, which can be either a barrier or promoter of language change (2001:85). "Speakers' attitudes can and sometimes do produce exceptions to most of the generalizations (concerning linguistic constraints)…" (2001:77). Silva-Corvalán (1989:170) also recognizes the impact of the subjective attitudes that bilingual speakers have toward each of their two languages on the occurrence of cross-linguistic influence.

I used Vassberg's (1993) work, Alsatian Acts of Identity: Language Use and Language Attitudes in Alsace, and Hornberger's (1989) work, Haku Yachaywasiman: la educación bilingüe y el futuro del quechua en Puno as the main references for my creation of the Language Attitudes Interview that I carried out during my 2003 field season. As mentioned above in the Literature Review and repeated here, Vassberg (1993:147) cites the work of Hofman (1977) and Mejías & Anderson (1988: 402) in her description of four dimensions of language attitudes, the

value dimension, the communicative dimension, the instrumental dimension, and the sentimental dimension:

> …the value dimension is related to the more lasting and perceived intrinsic worth of the language; the communicative dimension deals with 'public understanding, transmitting and communicating information, and interpersonal communication' in a language; instrumentalism refers to personal benefit and practical usefulness derived from choosing to speak a certain language; and the sentimental dimension refers to personal satisfaction and emotions evoked by the use of language.

The questions of my Language Attitudes Interview address all four dimensions described by Vassberg (1993).

6.4.1. Quechua Value Score

In order to investigate the relationship between my participants' language attitudes and the level of Quechua influence present in their Spanish speech, I determined a 'Quechua Value Score' for each of my participants. I calculated this 'Quechua Value Score' for each participant based on how my participants answered 10 different questions during the Language Attitudes Interview. In Table 38 below, in the 'Question' column, I present the 10 questions used to determine my participants' Quechua Value Scores. Also, in Table 38, in the 'Q #' (Question Number) column, I present a number indicating the order in which each question appeared in the Language Attitudes Interview. In the 'Dimension' column, I categorize each of my 10 questions as primarily pertaining to the 'Value', 'Communicative', 'Instrumental', or 'Sentimental' dimensions, as described by Vassberg (1993:147) above. Finally, in the 'Value' column of Table 38, I present my scheme for scoring my participants' responses.

Table 38. Scoring participants' Quechua Value Scores

Q #	Question	Dimension	Value
7.	All students in Peru should learn Quechua.	Communicative	True = 1 and False = -1
8.	All children in Peru should have the opportunity to receive their educations through the means of Quechua.	Communicative	True = 1 and False = -1
9.	Spanish is more important than Quechua.	Value	True = 1 and False = -1
12.	Knowledge of Quechua can be important at work.	Instrumental	True = 1 and False = -1
13a.	Which language do you prefer?	Value	Quechua = 1, Other = 0 and Spanish = -1
15a.	Which language is more important?	Value	Quechua = 1, Other = 0 and Spanish = -1
16a.	Which language is more beautiful?	Sentimental	Quechua = 1, Other = 0 and Spanish = -1
20a.	Do you identify yourself with the Quechua culture?	Sentimental	Yes = 1 and No = -1
27a.	Have you ever denied that you speak Quechua?	Sentimental	No = 1 and Yes = -1
29a.	Would you vote for a Quechua-speaking candidate?	Communicative	Yes = 1 and No = -1

Higher Quechua Value Scores indicate more positive attitudes toward Quechua while lower Quechua Value Scores indicate less positive attitudes toward Quechua. It was possible for my participants to have Quechua Value Scores between -10 and 10. The Quechua Value Scores of my subset of 70 participants ranged from - 4 to 10, with five participants scoring negative Quechua Value Scores and 65 participants scoring positive Quechua Value Scores. Thus, in general, my participants' Quechua Value Scores were more positive than negative, indicating generally positive attitudes toward Quechua.

6.4.2. Perceptions of the Four Dimensions of Quechua and Spanish Language Attitudes

In the case of question 9, as listed in Table 38 above, which I have categorized as primarily pertaining to the 'Value' dimension, participants were asked to decide whether the following statement was True or False: "Spanish is more important than Quechua". Out of my subset of 70 participants, approximately 48% responded 'True' while approximately 52%

responded ‘False’. In the case of question 13a, also pertaining to the ‘Value’ dimension, participants were asked, “Which language do you prefer?” Approximately 36% responded that they preferred Quechua, 35% preferred Spanish, and 29% responded that they preferred ‘Other’ (e.g. both Quechua and Spanish). In the case of question 15a, also pertaining to the ‘Value’ dimension, participants were asked, “Which language is more important?”. Approximately 32% responded that Quechua is more important, 45% responded that Spanish is more important, and 22% responded with ‘Other’. Therefore, regarding the perceived intrinsic worth of Quechua versus that of Spanish, my participants do not clearly recognize either Quechua or Spanish as being of more ‘Value’.

I have categorized my questions 7, 8, and 29a as primarily pertaining to the ‘Communicative’ dimension of language attitudes. In the case of question 7, participants were asked whether the following statement was ‘True’ or ‘False’, “All students in Peru should learn Quechua”. In response, approximately 93% of my sample responded ‘True’ and 7% responded ‘False’. In the case of question 8, participants were asked whether the following statement was ‘True’ or ‘False’: “All students in Peru should have the opportunity to receive their education through the means of Quechua”. Approximately 92% responded ‘True’ and ‘8% responded ‘False’. In the case of question 29a, participants were asked, “Would you vote for a Quechua-speaking candidate?” In reply, 89% responded ‘Yes’ and 11% responded ‘No’. Based on my participants’ answers to questions 7, 8, and 29a as well as their answers to a variety of other questions pertaining to the ‘Communicative’ dimension of language attitudes, I conclude that in general, my participants are positively inclined toward the public use and maintenance of Quechua for communicative reasons. Also, while the vast majority of my participants agreed that Spanish is more generally spoken in urban areas of Peru while Quechua is more generally

spoken in rural areas of Peru, the vast majority of my participants agreed that a knowledge of both languages is desirable while living in both urban and rural areas of Peru for communicative and other reasons.

I categorize question 12, above as pertaining primarily to the 'Instrumental' dimension of language attitudes. In the case of question 12, participants were asked to respond 'True' or 'False' to the following statement: "Knowledge of Quechua can be important at work". In response, 80% answered 'True' and 20% answered 'False'. During the course of the Language Attitudes Interview, I also asked participants whether they planned to use Quechua and Spanish personally in the future for their careers. Approximately 83% of my subset claimed that they planned to use Quechua in the future at work and 17% responded that they did not. Also, approximately 90% of my subset claimed that they planned to use Spanish in the future at work while 10% claimed that they did not. In response to question 11 of the Language Attitudes Interview, in which participants were asked to respond 'True' or 'False' to the following statement, "Spanish is more useful than Quechua", 66% responded 'True' and 34% responded 'False'. Therefore, in general, my participants seem to find both Quechua and Spanish to be personally useful. However, my participants generally recognize Spanish as being of greater 'Instrumental' value than Quechua. During the course of my Language Attitudes Interviews with my participants, many participants pointed out the fact that while training for certain professions, such as that of teacher, doctor, nurse, and lawyer, Peruvians today are highly encouraged to learn and use the Quechua language.

I have categorized questions 16a, 20a, and 27a above as primarily pertaining to the 'Sentimental' dimension of language attitudes. In response to question 16a, "Which language is more beautiful?", 70% responded that Quechua is more beautiful, 17% responded that Spanish is

more beautiful, and 13% responded 'Other'. In response to question 20a, "Do you identify yourself with the Quechua culture?", 75% responded 'Yes' and 25% responded 'No'. In response to question 27a, "Have you ever denied that you speak Quechua?", 89% responded 'No' and 11% responded 'Yes'. Therefore, based on my participants' responses to these three questions as well as their responses to a variety of other questions during the Language Attitudes Interview, I conclude that in general, my participants have strong positive feelings toward Quechua and derive personal satisfaction from their use of the Quechua language.

6.4.3. Correlation of 'Quechua Value Score' with Quechua Cross-Linguistic Influence

By representing my participants' Language Attitudes toward Quechua as a quantitative social factor, I was able to investigate the correlation of my participants' Quechua Value Scores with the level of Quechua influence present in their speech using regression analysis. In Table 39 below, I present the results of this regression analysis. In Table 39, in the 'Ungrouped Population' column, I present correlations found through the results of regression analysis carried out using the Quechua Value Scores of the entire subset of 70 participants. In order to obtain the correlations listed in the 'Averages for Grouped Population' column, I grouped the participants into groups of the same Quechua Value Score, found the average CLF Scores for these groups, and carried out a regression analysis on these average scores.

Table 39. Quechua Value Score correlated with Quechua cross-linguistic influence

	Ungrouped Population	Averages for Grouped Population
Total CLF	(r = 0.09)	(r = 0.30) + moderate
Implicational-Weighted Total CLF	(r = 0.20)	---
Calque-Weighted Total CLF	(r = 0.08)	---
Phonetic CLF	(r = 0.32) + moderate	(r = 0.57) + moderate
Morphosyntactic CLF	(r = -0.05)	(r = -0.34) - moderate
Total Calque CLF	(r = 0.05)	(r = 0.31) + moderate
Verb CLF	(r = 0.10)	(r = 0.45) + moderate
Calque CLF	(r = -0.12)	(r = 0.12)
Agreement CLF	(r = -0.18)	(r = -0.63) - strong
Syntactic CLF	(r = 0.20)	(r = 0.14)
Epistemic Calque CLF	(r = 0.14)	(r = 0.42) + moderate

We may observe that the results yielded both positive and negative correlations. Also, the only correlation listed in the 'Ungrouped Population' column is a moderate positive correlation for Phonetic CLF Score and Quechua Value Score. In the 'Averages for Grouped Population' column, I have listed five moderate positive correlations, one moderate negative correlation, and one strong negative correlation. The two negative correlations are for the Morphosyntactic CLF Score and the Agreement CLF Score. Again, the Agreement CLF Score is an element of the Morphosyntactic CLF Score. Thus, the negative correlation of the Agreement CLF Score is primarily responsible for the negative correlation of the Morphosyntactic CLF Score.

The positive correlations indicate that as my participants' Quechua Value Scores increase, so does the level of Quechua influence present in their speech. However, in the case of the Agreement CLF, as participants' Quechua Value Scores increase, their Agreement CLF Score decreases. Therefore, in general, it appears that participants with more positive attitudes toward Quechua exhibit a greater degree of Quechua influence in their Spanish speech. This might be expected as those who have positive attitudes toward Quechua may unconsciously or consciously desire to identify themselves as Quechua speakers through their Spanish speech.

However, in the case of agreement, participants with less positive attitudes toward Quechua exhibit more non-standard agreement in their Spanish speech.

Thus, my participants' Agreement CLF Scores seem to behave uniquely as compared with the other CLF Scores examined here. Above, we saw that a greater number of total years spent living in Cuzco correlated with a higher Agreement CLF Score. A higher Agreement CLF Score indicates the use of more non-standard agreement in Spanish. Also, those participants who claimed to have had monolingual Spanish-speaking acquaintances in the past also were found to have significantly higher Agreement CLF Scores. For that reason, in my discussion of the 'Total Years in Cuzco' and 'Monolingual Spanish-Speaking Acquaintances in the Past' social factors, I suggested that perhaps, non-standard agreement may be used by my participants to identify themselves as Quechua speakers. In other words, I suggested that this was evidence for the hypothesis that these participants may be using non-standard agreement in their Spanish in order to create an in-group variety of Spanish.

Therefore, it would make sense for individuals using non-standard Spanish agreement in order to identify themselves as Quechua speakers to want to identify themselves as Quechua speakers and to have positive attitudes toward Quechua. However, in the case of agreement, I found my participants with less positive attitudes toward Quechua to exhibit more non-standard agreement in their Spanish speech. Thus, it appears that my results for the Agreement CLF Score indicate conflicting explanations. It would seem odd for my participants to identify themselves as speakers of Quechua while they have less positive attitudes toward Quechua.

6.5. Summary

In summary, throughout the course of this chapter, I have responded to my third research goal, to investigate whether demographic characteristics, social network characteristics, and the language attitudes of my study participants are related to and correlate with their production of phonological, morphosyntactic, and calque cross-linguistic features.

Firstly, I will summarize my findings for the demographic social factors. In the case of gender, I did not find males' and females' CLF Scores to be significantly different. In the case of age, I found a generally positive correlation between older participants and higher CLF Scores. In the case of SLA Age, I found a generally positive correlation between participants having begun their Spanish acquisition at an older age and higher CLF Scores. In the case of the 'Language of Primary Education' social factor, I found significant results, namely that participants who received their primary education via Quechua generally had the highest Epistemic Calque CLF Scores, followed by those participants who had received their primary education through both Quechua and Spanish, followed by those participants who had received their primary educations through Spanish alone. In the case of my participants' 'Total Years of Schooling', I found a generally positive correlation between participants having received more years of education and higher CLF Scores.

Secondly, I will summarize my findings for the social network factors. In the case of Cuzco Arrival Age, I found a generally positive correlation between participants who migrated to Cuzco at older ages and higher CLF Scores. In the case of participants' 'Total Years in Cuzco', I found conflicting results, with a greater number of years spent living in Cuzco correlating positively with participants' Agreement CLF Scores and negatively with participants' Syntactic CLF Scores. I found no significant differences among the CLF Scores of those participants who

had had monolingual Spanish-speaking friends in the past versus those who had not. Also, I found no significant differences among the CLF Scores of those participants who had monolingual Spanish-speaking friends at the time they participated in the social network investigation versus those who had not. However, I did find a significant difference between the Agreement CLF Scores for those participants who had had monolingual Spanish-speaking acquaintances in the past (higher Agreement CLF) versus the Agreement CLF Scores for those participants who had not (lower Agreement CLF). Also, I found a significant difference between the Phonetic CLF Scores for those participants who had monolingual Spanish-speaking acquaintances at the time of the study (lower Phonetic CLF) versus the Phonetic CLF Scores for those participants who had not (higher Phonetic CLF).

Finally, in the case of language attitude, I found a generally positive correlation between my participants' higher Quechua Value Scores and higher CLF Scores. However, to the contrary, my participants' Agreement CLF Scores correlated negatively with my participants' Quechua Value Scores.

In the cases of the 'Total Years of Schooling', 'Total Years in Cuzco', and 'Monolingual Spanish-speaking Acquaintances in the Past' social factors, for which my participants' various higher CLF Scores correlated with my participants' having spent more years in school, having lived a longer period of time in Cuzco, and having had monolingual Spanish-speaking acquaintances in the past, I have suggested that perhaps, rather than having their Spanish assimilate to standard Peruvian Spanish, my participants purposefully use various Quechua cross-linguistic features in order to identify themselves as Quechua speakers and distinguish themselves from native Spanish speakers, thereby creating an in-group variety of Spanish. Having spent a greater number of years in school, having lived for a longer period of time in

Cuzco, and having had monolingual Spanish-speaking acquaintances means having had greater exposure to native Spanish speakers. I hypothesize that the more my participants have been in contact with native Spanish speakers, the more their desire to distinguish themselves from these native Spanish speakers and identify themselves as Quechua speakers.

6.6. Discussion

Throughout this section, I will compare my findings regarding my participants' language attitudes to other findings regarding the language attitudes of Quechua speakers.

My findings regarding the language attitudes of my participants toward Quechua differ significantly from those of Nancy Hornberger (1989). As mentioned in the Literature Review, Hornberger carried out an investigation of the language attitudes of bilingual Quechua-Spanish speakers of Puno, Peru. Among her conclusions, Hornberger claims that her study participants ignore Quechua while focusing their attention on the acquisition of Spanish, stop speaking Quechua after having left their home communities for any extended period of time, regularly deny speaking Quechua, recognize that they must acquire Spanish in order to achieve success, do not publicly recognize the value of Quechua, recognize Spanish as being superior to Quechua and of more importance than Quechua, and sharply distinguish the social domains and communication channels for the two languages, with Spanish being associated with progress, education, government, work, industry, bureaucracy, commerce and literacy and with Quechua being associated with the home, community, informal situations, private situations, humor, and oral communication. Hornberger (1989) hypothesizes that the language attitudes of her

participants are the result of being immersed in largely monolingual urban Spanish-speaking environments, where Quechua speakers are forced to acquire Spanish in order to survive.

My participants, unlike Hornberger's, do not ignore Quechua in their pursuit of their acquisition of Spanish. Also, unlike Hornberger's participants, my participants continue to speak Quechua even after having lived in the city of Cuzco for years. Also, as mentioned above, only 11% of my participants admitted to having denied speaking Quechua. Furthermore, my participants do not clearly recognize Spanish as being superior to Quechua or of more importance (the 'Value' dimension). Also, I found my participants to be positively inclined toward the public use and maintenance of Quechua for communicative reasons (the 'Communicative' dimension). Furthermore, my participants generally find both Quechua and Spanish to be personally useful (the 'Instrumental' dimension). Moreover, my participants generally have strong positive feelings toward Quechua and derive personal satisfaction from their use of the Quechua language (the 'Sentimental' dimension).

In addition, unlike Hornberger's findings, I find no such clear specialization of domains and communication channels for Spanish and Quechua among my participants. For example, Hornberger (1989) found Spanish to be associated with progress, education, government, work, and literacy. However, 83% of my participants claimed that they planned to use Quechua in the future at work. Furthermore, many of my participants recognize the necessity for Peruvian teachers (education domain), doctors, nurses, and lawyers (government domain) to speak Quechua. Also, in response to question 18a of the Language Attitudes Interview, "Do you read the newspaper or anything else in Quechua?" approximately 64% claimed that they did regularly read in Quechua while 36% claimed that they did not. Thus for my participants, Quechua is not limited to the oral channel of communication.

As mentioned above, along with my investigation of the language attitudes of my study participants, I carried out an investigation of the language attitudes of members of the larger Cuzco community. During my interview with Ciro Concha, a high-ranking primary education representative of the Cuzco Ministry of Education, I was generously given a few children's books written in Quechua, one of which has been used to teach primary school children in Cuzco to read and write Quechua.

My findings seem to support some of those of Von Gleich and Wölck, mentioned above in the Literature Review, who upon comparing the results of two nearly identical language attitude studies carried out in 1969 and 1979 among bilingual Peruvian Quechua-Spanish speakers, found a "narrowing of the gaps between the evaluation of the two languages and their speakers along almost all dimensions" (1994:46). Von Gleich and Wölck interpret this to mean that Peruvian Quechua-Spanish bilinguals have moved toward a "more stable and balanced stage of Quechua-Spanish bilingualism with less clear separation between domains of usage" (1994:47). However, Von Gleich and Wölck interpreted the dominance of Spanish in several domains as evidence of a "growing tendency of language shift from Quechua-Spanish bilingualism to Spanish monolingualism" (1994:48-9).

Here, I offer some possible explanations as to why my results differ so significantly from those of Hornberger (1989). Above, I mention that Hornberger identifies the language attitudes of her participants as being an effect of their being immersed in largely monolingual urban Spanish-speaking environments. Although my participants have generally migrated from rural areas within the Department of Cuzco to the city of Cuzco, they have chosen to live at or associate with the *Casa del Cargador* (CdC) (in the case of the males) and the *Centro de Apoyo Integral a la Trabajadora del Hogar* (CAITH) (in the case of the females). Although the city of

Cuzco is dominantly Spanish-speaking, my participants find the CdC and CAITH to be Quechua-Spanish bilingual 'islands' within the city of Cuzco. As the vast majority of those who live at and associate with the CdC and CAITH speak Quechua, while on the CdC and CAITH property, my participants are not immersed in a Spanish monolingual environment.

While the city community of Cuzco and Cuzco's educational system put pressure on my participants to shift to Spanish monolingualism, the continuous arrival of newly-migrated Quechua speakers to the CdC and CAITH keep my participants anchored to the Quechua language and identity. As I mention in section 3.3.2.4 above, 'Temporary Refuges', the general mission of the CdC and CAITH is to serve as a safe haven for those Quechua-speaking migrants in desperate need. The staff members of both agencies assist and encourage their inhabitants to become independent and self-sufficient as soon as possible after their arrival, thus creating open spaces for new inhabitants in greater need. Many of my participants claimed to speak Quechua most often at the CdC and CAITH. Furthermore, many of my participants pointed out the necessity of speaking in Quechua to newly arrived migrants to the CdC and CAITH with low proficiencies in Spanish.

Within the CdC and CAITH, my participants find support among each other as Quechua speakers. Also, interviews with the staff members of both the CdC and CAITH revealed that beyond serving as safe havens for newly migrated Quechua speakers, another mission of both agencies is to promote the use of Quechua, the Quechua identity, and self-esteem among the inhabitants. The staff members of both agencies accomplish this mission of Quechua promotion in a variety of ways. Both agencies schedule regular talks and workshops for inhabitants at which the Quechua language and identity are promoted and valued. Also, the staff members

often speak to the inhabitants in Quechua (whether or not Quechua is the native language of the staff members).

Also, CAITH has received funding since June of 2002 to broadcast its own radio show, *Sonqoykipi t'ikarisunchis*, 'We will bloom in your heart', during which CAITH girls speak in both Quechua and Spanish, present topics of importance and interest to domestic servants, and play traditional Andean music, such as *huaynos*. A more recent endeavor of CAITH is to regularly visit rural communities outside of the city of Cuzco, where the Quechua language is dominant, in order to keep the CAITH girls connected to the rural environments and to Quechua as well as for the benefit of the inhabitants of these rural communities, who meet with the CAITH girls to participate in a variety of activities.

Therefore, unlike in the case of Hornberger's participants, after migration to Cuzco, my participants do not feel as intense a need to assimilate to the urban Spanish monolingual community for survival. While it is true that my participants need to use the Spanish language to communicate with members of the Cuzco city community and for education within the city of Cuzco, within the CdC and CAITH, my participants are encouraged to value and use Quechua and to proudly identify themselves as Quechua-speakers with their own cultural inheritance. Perhaps for these reasons, my participants' attitudes toward Quechua are more positive than those of native Quechua speakers without such Quechua-supportive frameworks.

7. Conclusion

In conclusion, throughout the course of this dissertation, I have responded to my three separate but related research goals. In response to my first research goal, I examined the nature of the semantics and pragmatics of the Cuzco Quechua epistemic system, including the epistemic suffixes, *-mi/-n* and *-si/-s*, and the Quechua verb past tenses, *-rqa-* and *-sqa-*. Like Weber (1986) and Faller (2002), I find the Quechua epistemics to encode meaning beyond information source and level of certainty. However, having identified a variety of meanings and uses for the Quechua epistemics, my work takes a step beyond any that has been carried out to date on the semantics and pragmatics of the Quechua epistemics. Furthermore, in my treatment of my first research goal, I discussed similarities between the Cuzco Quechua epistemics and other epistemic systems.

Examination of my study participants' ranking of Quechua sentences for certainty in the first section of my Subjective Reaction Test revealed that six possible suffix-verb tense combinations were ordered by my participants from highest certainty to lowest certainty level in the following way: (1) Ø + *-rqa-*, (2) *-mi/-n* + *-rqa-*, (3) *-si/-s* + *-rqa-*, (4) Ø + *-sqa-*, (5) *-mi/-n* + *-sqa-*, and (6) *-si/-s* + *-sqa-*.

The results obtained from my key informant, Gómez, from Vásquez, a university student and member of the CdC, and from the second section of the Subjective Reaction Test carried out with participants from CAITH and from the CdC revealed that the five SPEAK discourse factors and three 'Distance' factors were perceived by my study participants as influencing their use of the Cuzco Quechua epistemic system. Also, examples taken from the responses of my study participants to the situations presented to them in the Role Play instrument as well as examples taken from spontaneous/informal conversations in Quechua supported the findings of the

Subjective Reaction Test. Generally, the six suffix-verb tense combinations, ordered (1) through (6) above, were found to represent various continua, including from higher certainty to lower certainty levels, more trustworthy to less trustworthy sources of information, more Speaker participation to less Speaker participation, and Closer to Farther Temporal, Spatial, and Psychological Distances.

In my treatment of my second research goal, I have presented the most comprehensive and systematic work on the characteristics of Andean Spanish to date. I began by describing three methods that I used to measure the influence of Quechua in my participants' Spanish speech, the Total CLF Score, Calque-Weighted Total CLF Score, and Implicational-Weighted Total CLF Score. I compared these three methods, discussed the limitations of these methods, and found Quechua to Spanish cross-linguistic influence to occur in my participants' speech as measured by these three different methods. I then described 31 different phonetic, morphosyntactic, and calque cross-linguistic features found in the speech of my participants and examined the specific case of the cross-linguistic influence of the Quechua epistemic system on the Spanish spoken by my participants. I also examined a possible connection between the use of the Quechua epistemics and Spanish calques of these and the Quechua worldview.

In regard to the current debate about the characterization of child SLA, as I found cross-linguistic influence to be present in the Spanish of my native Quechua-speaking participants, the majority of whom acquired Spanish as a second language during their childhood and early adolescence, my data appear to support a model of child SLA in which the final product is not the L2 itself but instead a 'Steady State ILG'. In other words, rather than achieving the acquisition of standard Peruvian Spanish, my participants seem to achieve the acquisition of something like a 'Steady State Interlanguage Grammar' for Spanish. Furthermore, these data

may support a model of child SLA in which the L1 plays a significant role in the acquisition of the L2. Therefore, my data could possibly support either White's (2000) first, third, or fifth models of adult SLA as applying in the case of child SLA, namely her 'Full transfer/partial (or no) access', 'Full transfer/full access', and 'Partial transfer/partial access'. Furthermore, it appears that these data do not support Dulay and Burt's (1974a, 1974b, and 1975) L1 = L2 Hypothesis that child second language acquisition is identical to child first language acquisition. Finally, these data could support the possibility that child SLA = adult SLA. In other words, as my participants do not achieve the target, standard Peruvian Spanish, the way in which they acquired their Spanish may not be fundamentally different from the way in which adults acquire second languages.

However, the presence of cross-linguistic influence in the Spanish of my participants may not be fully explained by universal properties of child SLA, determined by structures in the brain. Rather, sociolinguistic factors must also be taken into account. In response to my third research goal, I present the first extensive quantitative treatment of the relationships of social factors to Quechua cross-linguistic influence to date. Specifically, I found various demographic characteristics, various social network characteristics, and the language attitudes of my participants to correlate with their production and use of the Quechua to Spanish phonetic, morphosyntactic, and calque cross-linguistic features. In my treatment of my third research goal, having identified my participants' Total CLF Scores as satisfactorily representative of the level of Quechua influence present in their Spanish speech, I primarily examined relationships and correlations of social factors with my participants' Total CLF Scores and with a variety of sub-CLF Scores included within my participants' Total CLF Scores.

The demographic social factors shown to correlate with my participants' CLF Scores are 'Age', 'SLA Age', 'Language of Primary Education', and 'Total Years of Schooling'. The social network factors found to correlate with my participants' CLF Scores are 'Cuzco Arrival Age', 'Total Years in Cuzco', 'Monolingual Spanish-speaking Acquaintances in the Past', and 'Monolingual Spanish-speaking Acquaintances at the Time of the Study'. Finally, in general, I found my participants' language attitudes, as represented by their 'Quechua Value Scores', to correlate with their CLF Scores. Also, in my treatment of my third research goal, I compare my findings regarding my participants' language attitudes to other findings regarding the language attitudes of Quechua-Spanish bilingual speakers.

While presenting my results for my third research goal, I suggested that in the cases of the 'Total Years of Schooling', 'Total Years in Cuzco', and 'Monolingual Spanish-speaking Acquaintances in the Past' social factors, for which my participants' various higher CLF Scores correlated with my participants' having spent more years in school, having lived a longer period of time in Cuzco, and having had monolingual Spanish-speaking acquaintances in the past, my participants purposefully use various Quechua cross-linguistic features in order to identify themselves as Quechua speakers and distinguish themselves from native Spanish speakers, thereby creating an in-group variety of Spanish.

If my participants are indeed using Quechua cross-linguistic features purposefully in their Spanish in order to identify themselves as Quechua speakers, as is also supported by the fact that I found a generally positive correlation between my participants' higher 'Quechua Value Scores' and higher CLF Scores, then we may not account for the presence of the cross-linguistic features in my participants' speech based on SLA facts alone. Rather, linguistic, SLA facts and extra-

linguistic, sociolinguistic facts must be examined together in order to more completely explain cross-linguistic influence phenomena.

In other words, in any given situation of cross-linguistic influence, the particular linguistic facts of second language acquisition, such as the particular languages involved and the ages of the L2 learners, may explain only a portion of the resulting cross-linguistic influence phenomena. In order to account for the entire picture of cross-linguistic influence, one must step beyond the field of SLA into the field of sociolinguistics in order to examine the extra-linguistic facts, such as the particulars of the L2 learners' social networks and the L2 learners' language attitudes. Throughout the course of this dissertation, I draw on both fields, SLA and sociolinguistics, in order to more completely investigate the issue of my participants' Quechua to Spanish cross-linguistic influence.

Thus, in the case of my participants, the pervasive presence of cross-linguistic features in their Spanish may not be explained simply as the effect of the differences between Quechua and Spanish or because the native language must always exert a significant level of cross-linguistic influence. Rather, extra-linguistic factors, such as my participants' generally positive attitudes toward Quechua, must play a role in explaining the presence of the cross-linguistic features in their speech.

While my participants learned Quechua as a native language, they also assimilated a Quechua culture, tradition, and identity. In my treatment of my third research goal, I hypothesized that the more my participants had been in contact with native Spanish speakers, the greater their desire to distinguish themselves from these native Spanish speakers and identify themselves as Quechua speakers through their Spanish. In order to explain this hypothesis, I propose that human beings feel a greater need to recognize and exhibit their identity after having

been confronted with the 'other'. Thus, here, my participants may feel a greater need to recognize and exhibit their Quechua identity through their Spanish after having been extensively exposed to native Spanish speakers.

As mentioned above, both Gumperz and Goffman, interactional sociolinguists, examine the interaction among the self, the other, and context in conversation and view language as "…one of a number of symbolic resources that provide an index to the social identities and relationships being continually constructed during interaction" (Schiffrin, 1994:105-6). Hence, my participants may use Quechua cross-linguistic features in their Spanish in order to provide an index to their identity as Quechua speakers.

Having thoroughly examined the sociolinguistic situation of my study participants, this dissertation takes a step beyond most SLA work, which generally fails to examine sociolinguistic factors in any serious or systematic manner. Future investigations in SLA should also seek to account for characteristics of the speech production in the second language as a result of both internal, innate, universal facts relating to how the human brain may support and limit SLA as well as external, specific, sociolinguistic facts relating to the use, meaning, function, and importance of particular languages for particular groups of individuals.

7.1. Future Research

In order to expand upon the research presented here, I propose a variety of possible future endeavors. While this dissertation offers an analysis of the semantics and pragmatics of the Cuzco Quechua epistemic system, further work should seek to investigate correlations of the use of the epistemics with social factors, such as gender. This dissertation presents 31 different

cross-linguistic features found to be used by my participants. Further in-depth research on each of these 31 features will further illuminate the presence, importance and use of these features in Andean Spanish. Also, while carrying out further in-depth research on the phonetic cross-linguistic features presented here, the use of state-of-the-art technological devices will prove essential.

APPENDIX A

Demographic Questionnaire

You:

1. *¿Cómo te llamas?* 'What's your name?'
2. *¿Cuántos años tienes?* 'How old are you?'
3. *¿De dónde eres?* 'Where are you from?'
4. *¿Dónde naciste?* 'Where were you born?'
5. *¿Por cuánto tiempo vivías en (el lugar de donde eres)?* 'For how long have you lived in (the place where you're from)?'
6. *¿Cuál es tu primer idioma?* 'What's your first language?'
7. *¿Cuántos años tenías cuando empezaste a hablar (el castellano/el quechua)?* 'How old were you when you began to speak (Spanish/Quechua)?'

Education:

8. *¿Has asistido a la escuela?* 'Have you attended school?'
9. *¿Dónde?* 'Where?'
10. *¿Por cuántos años?* 'For how many years?'
11. *¿Enseñaba (la maestra/el profesor) en castellano o en quechua?* 'Did the teacher teach in Spanish or in Quechua?'

Past Speaking Habits:

12. *Cuando vivías en (el lugar de donde eres), ¿con quiénes hablabas en quechua?* 'When you were living in (the place where you're from), with whom did you speak Quechua?'
13. *Cuando vivías en (el lugar de donde eres), ¿con quiénes hablabas en castellano?* 'When you lived in (the place where you're from), with whom did you speak Spanish?'

Parents:

14. *¿Viven tus papas?* 'Are your parents alive?'
15. *¿De dónde (son/eran) tus papás?* 'Where (are/were) they from?'
16. *¿(Es/Era) el quechua el primer idioma de tus papás?* 'Is/Was Quechua your parents' first language?'
17. *¿(Hablan/Hablaban) tus papás el castellano?* '(Do/Did) your parents speak Spanish?'

Siblings:

18. *¿Tienes hermanos?* 'Do you have brothers and sisters?'

19. *¿Cuál es el primer idioma de tus hermanos?* 'What is your brothers' and sisters' first language?'

20. *¿Hablan tus hermanos el castellano?* 'Do your brothers and sisters speak Spanish?'

Recent Living Situation:

21. *¿Cuántos años tenías cuando llegaste a Cusco?* 'How old were you when you arrived in Cuzco?'

22. *¿Por cuánto tiempo has vivido acá en Cusco?* 'How long have you lived here in Cuzco?'

23. *¿Por cuánto tiempo has vivido aquí en (La Casa de Los Cargadores/CAITH)?* 'How long have you lived here in (La Casa de Los Cargadores/CAITH)?'

Present Speaking Habits:

24. *Ahora, ¿cuál idioma usas más, el castellano o el quechua?* 'Now, which language do you use more, Spanish or Quechua?'

25. *¿Con quiénes hablas en quechua?* 'With whom do you speak Quechua?'

26. *¿Con quiénes hablas en castellano?* 'With whom do you speak Spanish?'

APPENDIX B

Elicitation of Short Narratives: Casa del Cargador

A.

a.

1. *¿Cómo te enteraste de la Casa de los Cargadores?* 'How did you come to learn of la Casa de los Cargadores?'

2. *¿Quién es tu mejor amigo acá en la Casa de los Cargadores?* 'Who is your best friend here in la Casa de los Cargadores?'

3. *Describe a tu mejor amigo.* 'Describe your best friend.'

4. *¿Cómo se enteró tu amigo de la Casa de los Cargadores?* 'How did your best friend come to learn of la Casa de los Cargadores?'

5. *¿Qué haces cada día?* 'What do you do every day?'

6. *¿Qué hacías cuando eras un niño (más chiquito)?* 'What did you used to do when you were a child (smaller)?'

7. *¿Qué hacían (tus papás/tu amigo) cuando (eran/era) (niños/un niño)?* 'What did your parents (your friend) used to do when (they/he) (were/was) (children/a child)?'

8. *¿Qué diferencias hay entre la gente de Cusco y los campesinos?* 'What differences are there between the people from Cuzco and the peasants?'

9. *Describe dónde estamos en relación con la Plaza de Armas.* 'Describe where we are in relation to the Plaza de Armas.'

b.

1. *Imagina que estás aquí en la Casa de los Cargadores y un niño castellano-hablante te pregunta cómo ir de la Casa de los Cargadores a la Plaza de Armas. ¿Qué le dices?* 'Imagine that you are here in the Casa de los Cargadores and a Spanish-speaking child asks you how to go from the Casa de los Cargadores to the Plaza de Armas. What do you say to him?'

2. *Imagina que un señor mayor te pregunta cómo ir de la Casa de los Cargadores a Sacsayhuamán. ¿Qué le dices?* 'Imagine that an older gentleman asks you how to go from the Casa de los Cargadores to Sacsayhuamán. What do you say to him?'

3. *Imagina que ves que un niño está tirando piedras hacia un grupo de gente. ¿Qué dices a su mama?* 'Imagine that you see a boy throwing stones toward a group of people. What do you say to his mother?'

4. *Imagina que estás ocupado dentro de la Casa aquí. Tu amigo te encuentra y te dice que un grupo de turistas le han preguntado cómo ir de la Casa de los Cargadores a Sacsayhuamán. ¿Qué le dices a tu amigo?* 'Imagine that you are busy in the house here. Your friend finds you and says that a group of tourists have asked him how to go from the Casa de los Cargadores to Sacsayhuamán. What do you say to your friend?'

B.

1. *¿Qué hiciste esta mañana?* 'What did you do this morning?'

2. *¿Qué hiciste ayer?* 'What did you do yesterday?'

3. *¿Cómo es Abdón? ¿Cómo es Don Valentín? ¿Cómo es Teresa?* 'What is Abdón like? What is Don Valentín like? What is Teresa like?'

4. *¿Qué hizo Vladimiro Montesinos?* 'What did Vladimiro Montesinos do?'

5. *¿Qué pasó en Arequipa?* 'What happened in Arequipa?'

6. *¿Qué haces cada día?* 'What do you do every day?'

7. *¿Qué hacías cuando eras un niño (más chiquito)?* 'What did you used to do when you were a child (smaller)?'

8. *¿Qué hacían los Incas?* 'What did the Incas do/used to do?'

9. *Dime sobre el Señor de los Temblores.* 'Tell me about el Señor de los Temblores.'

APPENDIX C

Elicitation of Short Narratives: CAITH

1. *¿Qué hiciste esta mañana?* 'What did you do this morning?'
2. *¿Qué cosas hacías anoche?* 'What (things) did you do/were you doing last night?'
3. *¿Qué hiciste ayer?* 'What did you do yesterday?'
4. *¿Qué hiciste el domingo pasado?* 'What did you do last Sunday?'
5. *¿Conoces a Victoria? ¿Cómo es su carácter?* 'Do you know Victoria? What is she like?'
6. *¿Qué haces cada día?* 'What do you do every day?'
7. *¿Qué hizo Vladimiro Montesinos?* 'What did Vladimiro Montesinos do?'
8. *¿Qué pasó en Arequipa y en Tacna?* 'What happened in Arequipa and in Tacna?'
9. *¿Qué hacías cuando eras más chiquita?* 'What did you used to do when you were smaller?'
10. *¿Qué hicieron tus papás cuando eran niños?* 'What did your parents used to do when they were children?'
11. *¿Cómo encontraste esta casa?* 'How did you find this house?'
12. *¿Cómo conociste a Victoria?* 'How did you meet Victoria?'
13. *¿Quién es tu mejor amiga aquí?* 'Who is your best friend here?'
14. *Describe a tu amiga. ¿Cómo es?* 'Describe your friend. What is she like?'
15. *¿Cómo ella encontró la casa de Victoria?* 'How did she find Victoria's house?'
16. *¿Qué cosas hacías cuando llegaste aquí por la primera vez?* 'What (things) did you do when you arrived here for the first time?'

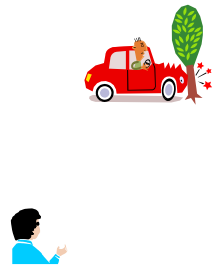
APPENDIX D

Role Play Investigation: Casa del Cargador

1. **<u>You witnessed first-hand:</u>**

a. *Un joven vio que un señor chocó su carro contra el árbol de la casa de su papá. Más tarde, su papá le pregunta al joven qué pasó. ¿Qué dirías si tú fueras este joven? Hacemos el diálogo como si tú fueras el joven y como si yo fuera tu papá. Yo, como tu papá te pregunto, "¿Qué pasó rato antes?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Iman kunachallan pasaran?"***

'A boy saw that a gentleman crashed his car against the tree in front) of his dad's house. Later, his dad asks him what happened. What would you say if you were this boy? Let's do the dialogue as if you were the boy and as if I was your dad. I, as your dad, ask you "What just happened?" **Now, give me the same answer in Quechua. "What just happened?"**'

A.	**B.**
	

2. **<u>You want them to think you witnessed first-hand:</u>**

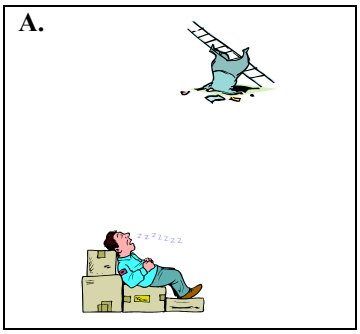
b. *Un joven está caminando con sus tres ovejas. De lejos ve a un señor con muchas ovejas. Cuando llega el joven a unas ruinas, solamente tiene dos ovejas. El joven cree que el señor le robó una oveja. Pero, no está seguro. No lo vio pasar. Más tarde su papá le pregunta dónde está la tercera oveja. El joven quiere decirle a su papá que está seguro de que el señor le robó la oveja, aunque realmente no sabe. No quiere admitir que perdió la oveja. Ahora, como si yo fuera tu papá y como si tú fueras este joven, ¿qué me dirías? Como tu papá, te pregunto, "¿Dónde está la tercera oveja?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Maypin hoq kaq oveja kashan?"***

'A boy is walking with his three sheep. Far away, he sees a gentleman with a lot of sheep. When the boy arrives at some ruins, he only has two sheep. The boy thinks that the gentleman robbed a sheep from him. But, he's not sure. He didn't see it happen. Later, his dad asks him where the third sheep is. The boy wants to tell his dad that he's sure that the gentleman robbed the sheep from him although he really doesn't know. He doesn't want to admit that he lost the sheep. Now, as if I was your dad and as if you were this boy, what would you tell me? Like your dad, I ask you, "Where is the third sheep?" **Now, give me the same answer in Quechua, "Where is the other sheep?"**'

A.	**B.**	**C.**
		

c. *Un joven se durmió mientras trabajaba con su compañero. Cuando el joven estaba durmiendo, su compañero de trabajo se cayó de unas gradas. Más tarde, el jefe del joven le pregunta qué pasó. El joven no quiere decirle a su jefe que estaba durmiendo. Entonces, como si tú fueras el joven, ¿qué le dirías a tu jefe? Ahora, como si yo fuera tu jefe, te pregunto, "¿Qué le pasó a tu compañero?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Iman khumpaykita pasaruran?"***

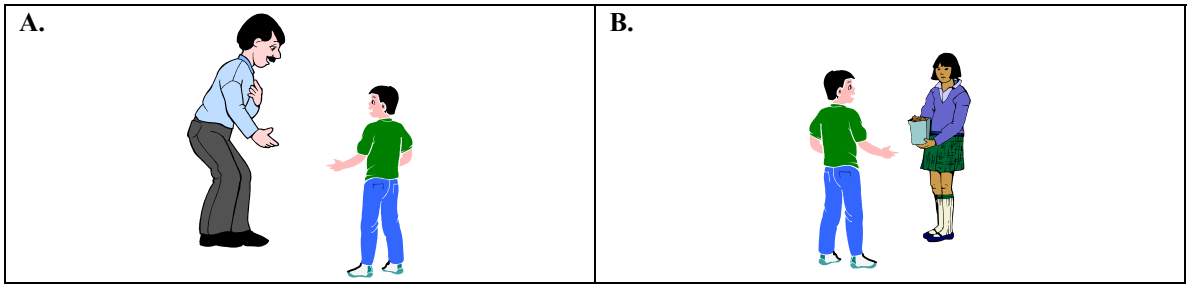
'A boy fell asleep while he was working with his friend/colleague. When the boy was sleeping, his friend/colleague fell down from a ladder. Later, the boy's boss asks him what happened. The boy doesn't want to tell his boss that he was sleeping. So, as if you were the boy, what would you tell your boss? Now, as if I was your boss, I ask you, "What happened to your friend/colleague?" **Now, give me the same answer in Quechua. "What happened to your friend?"**'



3. <u>Family told you:</u>

d. *Un día, un papá le dice a su hijo, "Tu abuelo ganó mil soles en la lotería." Al día siguiente, el hijo quiere contar eso a su amiga. Ahora, hacemos el diálogo, como si yo fuera tu amiga y como si tú fueras este joven. Como si yo fuera tu amiga, te pregunto, "¿Cómo está tu familia?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imaynallan familiayki kashan?"***

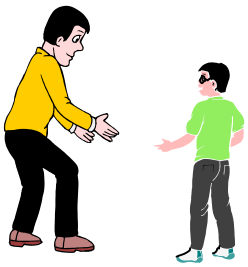
'One day, a dad says to his son, "Your grandfather won one thousand soles in the lottery." The next day, the son wants to tell this to his friend. Now, let's do the dialogue as if I was your friend and as if you were this boy. As if I were your friend, I ask you, "How's your family?" **Now, give me the same answer in Quechua. "How is your family doing?"**'



4. <u>Widespread knowledge:</u>

e. *Un joven leyó en un libro de historia que los españoles le atraparon a Atahuallpa. Al día siguiente, su papá le pregunta qué hicieron los españoles. Ahora, como si yo fuera tu papá y como si tú fueras este joven, qué me dirías. Haciendo el diálogo, te pregunto, "¿Qué hicieron los españoles?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan Españolkuna ruwaranku?"***

'A boy read in a history book that the Spaniards trapped Atahuallpa. The next day, his dad asks him what the Spaniards did. Now, as if I was your dad and as if you were this boy, what would you tell me? Doing the dialogue, I ask you, "What did the Spaniards do?" **Now, give me the same answer in Quechua. "What did the Spaniards do?"**'

A.	**B.**
	

f. *Un joven escuchó en la radio que hubo un atentado terrorista en los EE.UU. contra las torres gemelas. Al día siguiente, su papá le pregunta al joven qué escuchó en la radio. Ahora, como si yo fuera tu papá y como si tú fueras este joven, ¿qué me dirías? Te pregunto, "¿Qué escuchaste en la radio?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan radiopi uyariranki?"***

'A boy heard on the radio that there was a terrorist attack in the United States against the Twin Towers. The next day, his dad asks the boy what he heard on the radio. Now, as if I was your dad and as if you were this boy, what would you tell me? I ask you, "What did you hear on the radio?" **Now, give me the same answer in Quechua. "What did you hear on the radio?"**'

A.	**B.**
	

g. *Un joven vio en la televisión que un centro comercial, llamado Mesa Redonda, de la ciudad de Lima estaba incendiéndose, quemándose en llamas. Más tarde, su papá le pregunta qué vio en la televisión. Ahora, como si yo fuera tu papá y como si tú fueras este joven, ¿qué me dirías? Te pregunto, "¿Qué viste en la televisión?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatataq televisionpiri rikuranki?"***

'A boy saw on television that a mall, called Mesa Redonda, of the city of Lima, was burning up in flames. Later, his dad asks him what he saw on television. Now, as if I was your dad and as if you were this boy, what would you tell me? I ask you, "What did you see on television?" **Now, give me the same answer in Quechua. "And what did you see on television?"**'

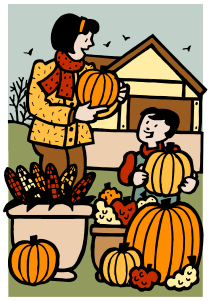
A.	**B.**
	

5. <u>Second-hand information:</u>

h. Un día, un chico estaba hablando con uno de sus conocidos. Su conocido le dijo que ***(su amigo le dijo que)*** *metió un gol en el partido de fútbol. Después, este chico quiere decirle a su mamá qué hizo (su conocido)* ***(el amigo de este conocido)*** *en el partido de fútbol. Ahora, como si yo fuera tu mamá, y como si tú fueras este chico, te pregunto, "¿Qué hizo tu conocido?" ("¿Qué hizo el amigo de tu conocido?")* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan reqsisqayki ruwaran?" ("Imatan reqsisqaykiq amigon ruwaran?")***

'One day, a boy was talking with one of his acquaintances. His acquaintance told him that (his friend told him that) he kicked a goal in the soccer game. Later, this boy wants to tell his mom what his acquaintance did (what the friend of his acquaintance did) in the soccer game. Now, as if I was your mom and as if you were this boy, I ask you, "What did your friend do?" (What did the friend of your acquaintance do?) **Now give me the same answer in Quechua. "What did your friend do?" (What did your acquaintance's friend do?")**'

A.

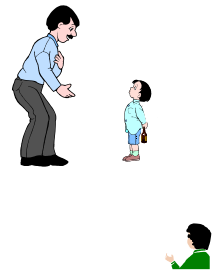


6. <u>You want them to think you weren't a witness:</u>

i. Un día, vio el hermano mayor que su hermanito le mintió a su papá sobre dónde estaba la botella de licor del papá. El hermanito tenía la botella escondida atrás de su espalda. Después, el papá le pregunta al hermano mayor si sabe algo de su botella. Para no avisar lo que vio decide decirle a su papá que su hermanito le dijo dónde estaba la botella. Ahora, hacemos el diálogo, como si yo fuera tu papá y como si tú fueras este joven. Te pregunto, "¿Dónde está mi botella?" ***Kunanmi, kikin respuestata runasimipi qowanki. "Maypin botellay kashan?"***

'One day, the older brother saw that his younger brother lied to their dad about where the dad's liquor bottle was. The little brother had the bottle hidden behind his back. Later, the dad asks the older brother if he knows anything about his bottle. In order not to report what he saw, he decides to tell his dad that his little brother told him where the bottle was. Now, let's do the dialogue as if I was your dad and as if you were this boy. I ask you, "Where is my bottle?" **Now, give me the same answer in Quechua. "Where is my bottle?"**'

A.

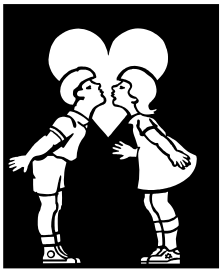


B.

7. <u>The information is doubtful:</u>

j. *A un joven le dijo un desconocido que su primito con su amiguita se besaron. (Pero, no lo cree porque su primo es muy tímido.)* ***(Lo cree, porque su primo es muy coqueto.)*** *El joven quiere decirle a su amiga lo qué escuchó sobre su primo. Ahora, como si tú fueras este joven y como si yo fuera tu amiga, te pregunto, "¿Qué hay de nuevo con tu primo?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan yachanki primochaykimanta?"***

'An unknown man told a boy that his little cousin kissed his little friend. (But, he doesn't believe it because his cousin is very shy.) **(He believes it, because his cousin is a big flirt.)** The boy wants to tell his friend what he heard about his cousin. Now, as if you were this boy and as if I was your friend, I ask you, "What's new with your cousin?" **Now, give me the same answer in Quechua. "What do you know about your little cousin?"**'

A.	**B.**
	

8. <u>Drunk:</u>

k. *Un día, cuando un joven estaba muy borracho, vio que un chofer chocó su carro contra un árbol. Más tarde, quiere decírselo a su amiga. Ahora, como si yo fuera tu amiga y como si tú fueras este joven, ¿qué me dirías? Te pregunto, "¿Qué noticias sabes?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Ima noticiatan yachanki?"***

'One day, when a boy was very drunk, he saw that a driver crashed his car against a tree. Later, he wants to tell his friend about it. Now, as if I was your friend and as if you were this boy, what would you tell me? I ask you, "Do you know/have any news?" **Now, give me the same answer in Quechua. "Do you know/have any news?"**'

A.	**B.**
	

9. <u>Sleeping:</u>

l. *Una noche, un joven estaba soñando. En su sueño, (muy claro vio que)* ***(recordaba un poco no más que)****, una vaca estaba volando en el cielo. Al día siguiente, el joven quiere contarle a su papá sobre su sueño. Ahora, hacemos el diálogo, como si yo fuera tu papá y como si tú fueras este joven. Te pregunto, "¿Qué soñaste anoche?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan ch'isi mosqokuranki?"***

'One night, a boy was dreaming. In his dream, (very clearly, he saw that) (he remembered only a little bit that) a cow was flying in the sky. The next day, the boy wants to tell his dad about his dream. Now, let's do the dialogue, as if I was your dad and as if you were this boy. I ask you, "What did you dream last night?" **Now, give me the same answer in Quechua. "What did you dream last night?"**'

A.

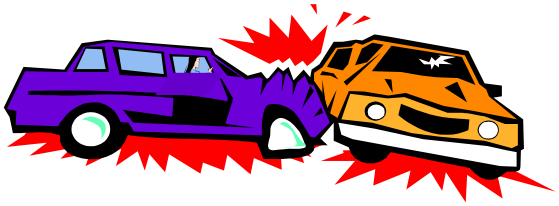
APPENDIX E

Role Play Investigation: CAITH

1. **<u>You witnessed first-hand:</u>**

a. *Una joven estaba manejando el carro morado de su mamá y chocó con otro carro. Más tarde, su mamá le pregunta a la joven qué pasó. La joven quiere decirle a su mamá lo qué pasó. ¿Qué dirías tú si fueras esta joven? Hacemos el diálogo como si tú fueras la joven y como si yo fuera tu mamá. Yo, como tu mamá te pregunto, "¿Qué pasó?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Iman pasaruran?"***

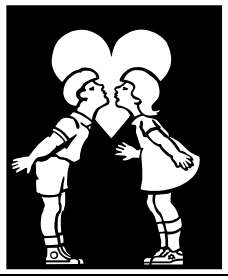
'A girl was driving her mom's purple car and crashed into another car. Later, her mom asks the girl what happened. The girl wants to tell her mom what happened. What would you say if you were this girl? Let's do the dialogue as if you were the girl and as if I was your mom. I, as your mom, ask you, "What happened?" **Now, give me the same answer in Quechua. "What just happened?"'**.

A.	**B.**
	

2. **<u>You want them to think you witnessed first-hand:</u>**

b. *Una joven hizo una apuesta con su amigo. La apuesta era sobre quién sería la primera persona que viera que su prima se haya besado. Aunque la joven no le vio besarse a su prima, la joven le dice a su amigo que la vio besándose para poder ganar la apuesta. Haciendo el diálogo como si yo fuera el joven y como si tú fueras la joven, ¿qué me dirías? Te pregunto, "¿Tienes alguna noticia sobre tu primita?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Primachaykimanta imallatapas yachankichu?"***

'A girl made a bet with her friend. The bet was on who would be the first person to see that her cousin had kissed. Although the girl didn't see her cousin get kissed, the girl tells her friend that she did see her kissing in order to win the bet. Doing the dialogue as if I was the boy and as if you were the girl, what would you tell me? I ask you, "Do you have any news about your little cousin?" **Now, give me the same answer in Quechua. "Do you know anything about your little cousin?"'**

A.	**B.**
	

3. **<u>Family told you:</u>**

c. *Un día, una mamá le dice a su hija, "Tu abuelo ganó mil soles en la lotería." Al día siguiente, la hija quiere contar eso a su amiga. Ahora, hacemos el diálogo, como si yo fuera tu amiga y como si tú fueras esta joven. Como si yo fuera tu amiga, te pregunto, "¿Cómo está tu familia?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imaynallan familiayki kashan?"***

'One day, a mom says to her daughter, "Your grandfather won one thousand soles in the lottery." The next day, the daughter wants to tell that to her friend. Now, let's do the dialogue, as if I was your friend and as if you were this girl. As if I was your friend, I ask you, "How's your family doing?" **Now, give me the same answer in Quechua. "How is your family doing?"**'

A.	**B.**
	

4. **<u>Widespread knowledge:</u>**

d. *Una joven leyó en su libro de historia que los españoles le atraparon a Atahuallpa. Al día siguiente, su amiga le pregunta qué hicieron los españoles. Ahora, como si yo fuera tu amiga y como si tú fueras esta joven, qué me dirías. Haciendo el diálogo, te pregunto, "¿Qué hicieron los españoles?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan Españolkuna ruwaranku?"***

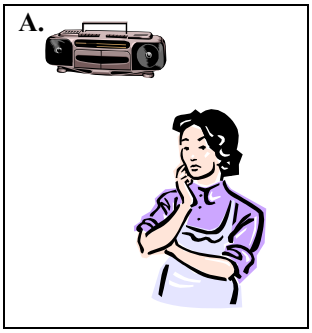
'A girl read in her history book that the Spaniards trapped Atahuallpa. The next day, her friend asks her what the Spaniards did. Now, as if I was your friend and as if you were this girl, what would you tell me? Doing the dialogue, I ask you, "What did the Spaniards do?" **Now, give me the same answer in Quechua. "What did the Spaniards do?"**'

A.	**B.**
	

e. *Una joven escuchó en la radio que hubo un atentado terrorista en los EE.UU. contra las torres gemelas. Al día siguiente, su papá le pregunta a la joven qué escuchó en la radio. Ahora, como si yo fuera tu papá y como si tú fueras esta joven, ¿qué me dirías? Te pregunto, "¿Qué escuchaste en la radio?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan radiopi uyariranki?"***

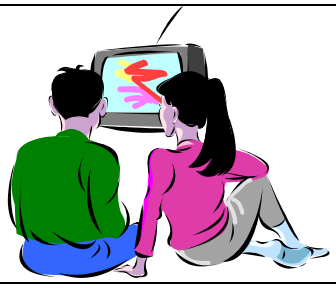
'A girl heard on the radio that there was a terrorist attack in the United States against the Twin Towers. The next day, her dad asks the girl what she heard on the radio. Now, as if I was your dad and as if you were this girl, what would you tell me? I ask you, "What did you hear on the radio?" **Now, give me the same answer in Quechua. "What did you hear on the radio?"**'

A.



f. *Una joven vio en la televisión que un centro comercial, llamado Mesa Redonda, de la ciudad de Lima estaba incendiéndose, quemándose en llamas. Más tarde, su papá le pregunta qué vio en la televisión. Ahora, como si yo fuera tu papá y como si tú fueras esta joven, ¿qué me dirías? Te pregunto, "¿Qué viste en la televisión?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan televisionpi rikuranki?"***

'A girl saw on television that a mall, called Mesa Redonda, of the city of Lima, was burning up in flames. Later, her dad asks her what she saw on television. Now, as if I was your dad and as if you were this girl, what would you tell me? I ask you, "What did you see on television?" **Now, give me the same answer in Quechua. "What did you see on television?"**'

A.	**B.**
	

5. **<u>Second-hand information:</u>**

g. *Un día, una joven estaba hablando con uno de sus conocidos por teléfono. Este chico le dice que* ***(su amigo le dijo que)*** *metió un gol en el partido de fútbol. Después, ella quiere decirle a su mamá qué hizo (este chico)* ***(el amigo de este chico)*** *en el partido de fútbol. Ahora, como si yo fuera tu mamá, y como si tú fueras esta joven, te pregunto, "¿Qué hizo tu conocido?" ("¿Qué hizo el amigo de tu conocido?")* ***Kunanmi, kikin respuestata runasimipi qowanki. "Imatan reqsisqayki ruwaran?" ("Imatan reqsisqaykiq amigon ruwaran?")***

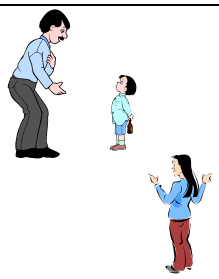
'One day, a girl was talking with one of her acquaintances on the phone. This boy tells her that (his friend told him that) he kicked a goal during the soccer game. Later, she wants to tell her mom what he did (what her acquaintance's friend did) in the soccer game. Now, as if I was you mom and as if you were this girl, I ask you, "What did your acquaintance do?" ("What did your acquaintance's friend do?") **Now, give me the same answer in Quechua. "What did your acquaintance do?" ("What did your acquaintance's friend do?")**'

A.	**B.**
	

6. **<u>You want them to think you weren't a witness:</u>**

h. *Un día, vio la hermana mayor que su hermanito le mintió a su papá sobre dónde estaba su botella de licor. El hermanito tenía la botella escondida atrás de su espalda. Después, el papá le pregunta a la hija si sabe algo de su botella. Para no avisar lo que vio, decide decirle a su papá que su hermanito le dijo dónde estaba la botella. Ahora, hacemos el diálogo, como si yo fuera tu papá y como si tú fueras esta joven. Te pregunto, "¿Dónde está mi botella?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Maypin botellay kashan?"***

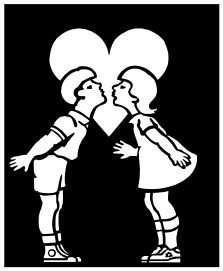
'One day, the older sister saw that her little brother lied to their dad about where the dad's liquor bottle was. The little brother had the bottle hidden behind his back. Later, the dad asks the daughter if she knows anything about his bottle. In order to not report what she saw, she decides to tell her dad that her little brother told her where the bottle was. Now, let's do the dialogue, as if I was your dad and as if you were this girl. I ask you, "Where is my bottle?" **Now, give me the same answer in Quechua. "Where is my bottle?"**'

A.	B.
	

7. <u>The information is doubtful:</u>

i. A una mamá le dijo un desconocido que su hijo y su amiguita se besaron. (Pero, no lo cree porque su hijo es muy tímido.) ***(Lo cree porque su hijo es muy coqueto.)*** *La mamá quiere decirle a su amiga lo qué escuchó sobre su hijo. Ahora, como si tú fueras la mamá y como si yo fuera tu amiga, te pregunto, "¿Qué noticias hay sobre tu hijo?"* ***Kunanmi, kikin respuestata runasimipi qowanki. "Ima notician wawaykimanta kashan?"***

'An unknown man tells a mom that her son and his little friend kissed. (But, she doesn't believe it because her son is very shy.) (She believes it because her son is a big flirt.) The mom wants to tell her friend what she heard about her son. Now, as if you were the mom and as if I was your friend, I ask you, "What news are there about your son?" **Now, give me the same answer in Quechua. "What news are there about your son?"**'

A.	B.
	

j. En una fiesta de cumpleaños, un payaso les dijo a los chiquitos que en otra fiesta de cumpleaños hizo desaparecer un conejo. Pero, los chiquitos no lo creen. Una de las chiquitas estaba en el baño cuando el payaso les dijo. La chiquita quiere saber qué pasó mientras estaba en el baño. Ahora, como si yo fuera la chiquita y como si tú fueras uno de los chiquitos que le escuchó al payaso, te pregunto, "¿Qué pasó mientras yo estaba en el baño?" ***Kunanmi, kikin respuestata runasimipi qowanki. "Noqaq bañopi kanaykama, iman pasaruran?"***

'At a birthday party, a clown told the kids that at another birthday party he made a rabbit disappear. But, the kids don't believe it. One of the little girls was in the bathroom when the clown told them. The little girl wants to know what happened while she was in the bathroom. Now, as if I was the little girl and as if you were one of the kids that heard the clown, I ask you, "What happened while I was in the bathroom?" **Now, give me the same answer in Quechua. "What happened while I was in the bathroom?"**'

A.	B.
	

Drunk:

k. *Un día, cuando una joven estaba muy borracha, vio que un chofer chocó su carro contra un árbol. Más tarde, quiere decírselo a su amiga. Ahora, como si yo fuera tu amiga y como si tú fueras esta joven, ¿qué me dirías? Te pregunto, "¿Qué noticias sabes**?" Kunanmi, kikin respuestata runasimipi qowanki. "Ima noticiatan yachanki?"***

'One day, when a girl was very drunk, she saw that a driver crashed his car against a tree. Later, she wants to tell her friend about it. Now, as if I was your friend and as if you were this girl, what would you tell me? I ask you, "What news do you know/have?" **Now, give me the same answer in Quechua. "What news do you know/have?"**'

A.	**B.**
	

Sleeping:

l. *Una noche, una joven estaba soñando. En su sueño, (muy claro vio que) (recordaba un poco no más que) su hermanita hizo caer un vaso de agua al suelo y un mozo tuvo que limpiar el agua. Al día siguiente, esta joven quiere contarle a su mamá sobre su sueño. Ahora, hacemos el diálogo como si yo fuera tu mamá y como si tú fueras esta joven. Te pregunto, "¿Qué soñaste anoche**?" Kunanmi, kikin respuestata runasimipi qowanki. "Imatan ch'isi mosqokuranki?"***

'One night, a girl was dreaming. In her dream (very clearly, she saw that) (she remembered only a little bit that) her little sister made a glass of water fall on the floor and a waiter had to clean up the water. The next day, this girl wants to tell her mom about her dream. Now, let's do the dialogue as if I was your mom and as if you were this girl. I ask you, "What did you dream last night?" **Now, give me the same answer in Quechua. "What did you dream last night?"'**

A.	**B.**
	

APPENDIX F

Subjective Reaction Test Version 1a

(1a) *Pon en el orden de certitud (1= estás más seguro; 6 = menos seguro)* 'Put in order of certainty (1 = you are more sure; 6 = less sure)'

_____ *Waynasipaskuna papata**n** ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**n** ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**s** ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**s** ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'

1. *Paramurqan.* 'It rained.'
a. Lo más probable es que la persona que está diciendo esto solamente olfateó pero no vio y no se sintió la lluvia.
(a. Most likely, the person who is saying this only smelled but did not see and did not feel the rain.)
b. Lo más probable es que la persona que está diciendo esto solamente se sintió pero no vio y no olfateó la lluvia.
(b. Most likely, the person who is saying this only felt but did not see and did not smell the rain.)

2. *T'anta allin kasqa.* 'The bread was good.'
a. Lo más probable es que la persona que está diciendo esto saboreó pero no vio y no olfateó el pan.
(a. Most likely, the person saying this tasted but did not see and did not smell the bread.)
b. Lo más probable es que la persona que está diciendo esto olfateó pero no vio y no saboreó el pan.
(b. Most likely, the person saying this smelled but did not see and did not taste the bread.)

3. *Warmin pitarqan.* 'The woman smoked.'
a. Lo más probable es que la persona que está diciendo esto solamente olfateó el humo del cigarrillo pero no lo vio.
(a. Most likely, the person saying this only smelled the cigarette smoke but did not see it.)
b. Lo más probable es que la persona que está diciendo esto vio y olfateó el humo del cigarrillo.
(b. Most likely, the person saying this saw and smelled the cigarette smoke.)

4. *Mihunatan wayk'usharqan.* '(S)he was cooking the food.'
a. Lo más probable es que la persona que está diciendo esto solamente olfateó pero no vio y no escuchó que estaba cocinando la comida.
(a. Most likely, the person saying this only smelled but did not see and did not hear that the food was cooking.)
b. Lo más probable es que la persona que está diciendo esto solamente escuchó pero no vio y no olfateó que alguien estaba cocinando comida.
(b. Most likely, the person saying this only heard but did not see and did not smell that someone was cooking food.)

5. *Wayronqo ulluruwasqa.* 'The bee stung me.'
a. Lo más probable es que la persona que está diciendo esto no vio cuando la abeja le picó pero solamente se lo sintió.
(a. Most likely, the person saying this didn't see when the bee bit him but only felt it.)
b. Lo más probable es que la persona que está diciendo esto vio y se sintió cuando la abeja le picó.
(b. Most likely, the person saying this saw and felt when the bee bit him.)

6. *Wayronqon ulluruwarqan.* 'The bee stung me.'
a. Lo más probable es que la persona que está diciendo esto solamente se sintió pero no vio y no escuchó cuando la abeja le picó.
(a. Most likely, the person saying this only felt but did not see and did not hear when the bee stung him.)

b. Lo más probable es que la persona que está diciendo esto escuchó y se sintió pero no vio cuando la abeja le picó.
(b. Most likely, the person saying this heard and felt but did not see when the bee stung him.)

7. *Trago tortapi kashasqa.* 'There was alcohol in the cake.'
a. Lo más probable es que la persona que está diciendo esto vio cuando el cocinero le echó trago a la torta.
(a. Most likely, the person saying this saw when the cook put alcohol into the cake.)
b. Lo más probable es que la persona que está diciendo esto solamente saboreó el trago en la torta pero no vió cuando el cocinero le echó trago a la torta.
(b. Most likely, the person saying this only tasted the alcohol in the cake but did not see when the cook put the alcohol into the cake.)

8. *Hank'a allinmi karqan.* 'The toasted corn was good.'
a. Lo más probable es que la persona que está diciendo esto solamente escuchó cuando alguien comía la hank'a pero no la saboreó y no lo vio.
(a. Most likely, the person saying this only heard when someone was eating the toasted corn but did not taste it and didn't see it.)
b. Lo más probable es que la persona que está diciendo esto solamente saboreó la hank'a pero no lo vio y no lo escuchó.
(b. Most likely, the person saying this only tasted the toasted corn but did not see it and didn't hear it.)

9. *Takiqmi waqasharqan.* 'The singer was crying.'
a. Lo más probable es que la persona que está diciendo esto vio y escuchó cuando el cantante lloraba.
(a. Most likely, the person saying this saw and heard when the singer was crying.)
b. Lo más probable es que la persona que está diciendo esto solamente escuchó y no vio cuando el cantante lloraba.
(b. Most likely, the person saying this only heard and did not see when the singer was crying.)

10. *Ch'uño phasisqan karqan.* 'The dehydrated potato was boiled.'
a. Lo más probable es que la persona que está diciendo esto no es la persona que sancochó las papas.
(a. Most likely, the person saying this isn't the person who boiled the potatoes.)
b. Lo más probable es que la persona que está diciendo esto sancochó las papas.
(b. Most likely, the person saying this boiled the potatoes.)

11. *Limamanmi rirqan.* '(S)he went to Lima.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que su mamá es la persona que fue a Lima.
(a. Most likely, the person saying this heard this information from his/her mom and his/her mom is the person who went to Lima.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que la amiga de la mamá es la persona que fue a Lima.
(b. Most likely, the person saying this heard this information from his/her mom and the mom's friend is the person who went to Lima.)

12. *Qhatupi papakunatan rantirqan.* '(S)he bought potatoes at the market.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mejor amiga.
(a. Most likely, the person saying this heard this information from his/her best friend.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de un desconocido.
(b. Most likely, the person saying this heard this information from a stranger.)

13. *Chincheropi misapis takisqa.* '(S)he sang in Chinchero at a mass.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que la amiga de la mamá es la persona que cantó en la misa.
(a. Most likely, the person saying this heard this information from his/her mom and the friend of the mom is the person who sang at the mass.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de un desconocido y que la amiga de la persona desconocida es la que cantó en la misa.

(b. Most likely, the person saying this heard this information from a stranger and the stranger's friend is the one who sang at the mass.)

14. *Askhata mihusqaku.* 'They ate a lot.'
a. Lo más probable es que la persona que está diciendo esto sabe que lo pasó recién.
(a. Most likely, the person saying this knows that it happened recently.)
b. Lo más probable es que la persona que está diciendo esto sabe que lo pasó hace mucho tiempo.
(b. Most likely, the person saying this knows that it happened a long time ago.)

15. *Allintas takisqaku.* 'They sang well.'
a. Lo más probable es que la persona que está diciendo esto los miró cantar en la televisión.
(a. Most likely, the person saying this saw them sing on television.)
b. Lo más probable es que a la persona que está diciendo esto le contó un conocido por teléfono.
(b. Most likely, an acquaintance of the person saying this told this person on the phone.)

16. *Wayna bolata hayt'arqan.* 'The boy kicked the ball.'
a. Lo más probable es que la persona que está diciendo esto miró esto en la televisión.
(a. Most likely, the person saying this saw this on television.)
b. Lo más probable es que la persona que está diciendo esto lo escuchó en la radio.
(b. Most likely, the person saying this heard it on the radio.)

17. *Runasimipi rimasqani chay runawan.* 'I spoke in Quechua with that person.'
a. Lo más probable es que la persona que está diciendo esto quiso hablar en quechua con la persona.
(a. Most likely, the person saying this wanted to speak in Quechua with the person.)
b. Lo más probable es que la persona que está diciendo esto habló en quechua con la persona por equivocación.
(b. Most likely, the person saying this spoke in Quechua with the person by mistake.)

18. *Runasimipin rimarqani.* 'I spoke in Quechua.'
a. Lo más probable es que la persona que está diciendo esto estaba orgullosa de hablar quechua en ese momento.
(a. Most likely, the person saying this was proud to speak Quechua at that moment.)
b. Lo más probable es que la persona que está diciendo esto tenía vergüenza de hablar quechua en ese momento.
(b. Most likely, the person saying this was ashamed to speak Quechua at that moment.)

19. *Michi wallpa aychatan mihurqan.* 'The cat ate chicken.'
a. Lo más probable es que la persona que está diciendo esto está segura.
(a. Most likely, the person saying this is sure.)
b. Lo más probable es que la persona que está diciendo esto no está segura.
(b. Most likely, the person saying this isn't sure.)

20. *Trago tortapi kashasqa.* 'The alcohol was in the cake.'
a. Lo más probable es que para la persona que está diciendo esto, era una sorpresa.
(a. Most likely, for the person saying this, it was a surprise.)
b. Lo más probable es que para la persona que está diciendo esto, no era ninguna sorpresa.
(b. Most likely, for this person saying this, it wasn't a surprise.)

21. *Fotopi waynota tusurqanku.* 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto ve que la foto está borrosa.
(a. Most likely, the person saying this sees that the photo is blurry.)
b. Lo más probable es que la persona que está diciendo esto ve que la foto está nítida.
(b. Most likely, the person saying this sees that the photo is clear.)

22. *Fotopi waynota tusurqanku.* 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto sabe que la persona a quién lo está contando va a poder ver la foto.
(a. Most likely, the person saying this knows that the person to whom he/she is telling this is going to be able to see the photo.)

b. Lo más probable es que la persona que está diciendo esto sabe que la persona a quién lo está contando no va a poder ver la foto.
(b. Most likely, the person saying this knows that the person to whom he/she is telling this won't be able to see the photo.)

23. *Fotopi waynota tusurqanku.* 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto salió en la foto.
(a. Most likely, the person saying this came out in the photo.)
b. Lo más probable es que la persona que está diciendo esto no salió en la foto.
(b. Most likely, the person saying this didn't come out in the photo.)

24. *Fotopi waynota tusurqanku.* 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto no estaba allí cuando se sacó la foto.
(a. Most likely, the person saying this wasn't there when the photo was taken.)
b. Lo más probable es que la persona que está diciendo esto estaba allí cuando se sacó la foto.
(b. Most likely, the person saying this was there when the photo was taken.)

25. *Chincheropi tiyasqa.* '(S)he lived in Chinchero.'
a. Lo más probable es que la persona que está diciendo esto leyó esta información en un libro respetado y confiable.
(a. Most likely, the person saying this read this information in a respected and trustworthy book.)
b. Lo más probable es que la persona que está diciendo esto leyó esta información en una revista no respetada y no confiable.
(b. Most likely, the person saying this read this information in a disrespected and untrustworthy magazine.)

26. *Qowe aychatas mihurqan.* 'He/she/it ate guinea pig.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su primo sobre el amigo del primo y que lo pasó recién.
(a. Most likely, the person saying this heard this information from his/her cousin about the cousin's friend and it happened recently.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de su primo sobre el amigo del primo y que lo pasó hace mucho tiempo.
(b. Most likely, the person saying this heard this information from his/her cousin about the cousin's friend and it happened a long time ago.)

27. *Mayupin kasqa.* 'It/he/she was in the river.'
a. Lo más probable es que la persona que está diciendo esto lo vio y no estaba sorprendida.
(a. Most likely, the person saying this saw it and wasn't surprised.)
b. Lo más probable es que la persona que está diciendo esto lo vio y estaba sorprendida.
(b. Most likely, the person saying this saw it and was surprised.)

28. *Llankaq mihusqa.* 'The worker ate.'
a. Lo más probable es que la persona que está diciendo esto lo vio.
(a. Most likely, the person saying this saw it.)
b. Lo más probable es que la persona que está diciendo esto lo soñó.
(b. Most likely, the person saying this dreamt it.)

29. *Tusuq allinta tususqa.* 'The dancer danced well.'
a. Lo más probable es que la persona que está diciendo esto estaba borracha cuando lo vio.
(a. Most likely, the person saying this was drunk when he/she saw it.)
b. Lo más probable es que la persona que está diciendo esto no estaba borracha cuando lo vio.
(b. Most likely, the person saying this wasn't drunk when he/she saw it.)

30. *Ovejachaysi chinkakusqa.* 'My little sheep got lost.'
a. Lo más probable es que la persona que está diciendo esto piensa que va a recibir castigo.
(a. Most likely, the person saying this things he/she will receive a punishment.)

b. Lo más probable es que la persona que está diciendo esto no piensa que va a recibir castigo.
(b. Most likely, the person saying this doesn't think that he/she will receive a punishment.)

31. *Limamanmi rinqa.* '(S)he will go to Lima.'
a. Lo más probable es que la persona que está diciendo esto sabe que es mala noticia.
(a. Most likely, the person saying this knows that it is bad news.)
b. Lo más probable es que la persona que está diciendo esto sabe que es buena noticia.
(b. Most likely, the person saying this knows that it is good news.)

32. *Wasiykimanmi risaqku.* 'We're going to your house.'
a. Lo más probable es que la persona que está diciendo esto sabe que es verdad.
(a. Most likely, the person saying this knows that it is true.)
b. Lo más probable es que la persona que está diciendo esto sabe que es una mentira.
(b. Most likely, the person saying this knows that it is a lie.)

33. *Yachachiq Ollantaytambomansi rinqa.* 'The teacher will go to Ollantaytambo.'
a. Lo más probable es que la persona que está diciendo esto piensa que el profesor irá a Ollantaytambo.
(a. Most likely, the person saying this thinks the teacher will go to Ollantaytambo.)
b. Lo más probable es que la persona que está diciendo esto no piensa que el profesor irá a Ollantaytambo.
(b. Most likely, the person saying this doesn't think the teacher will go to Ollantaytambo.)

34. *Qosqomansi risqa.* 'He/she went to Cuzco.'
a. Lo más probable es que la persona que está diciendo esto está hablando con un adulto.
(a. Most likely, the person saying this is talking with an adult.)
b. Lo más probable es que la persona que está diciendo esto está hablando con un joven.
(b. Most likely, the person saying this is talking with an adolescent.)

35. *Yachachiqniy runasimipis rimasqa.* 'My teacher spoke in Quechua.'
a. Lo más probable es que la persona que está diciendo esto es una chica.
(a. Most likely, the person saying this is a girl.)
b. Lo más probable es que la persona que está diciendo esto es un chico.
(b. Most likely, the person saying this is a boy.)

APPENDIX G

Subjective Reaction Test Version 2a

(2a) Pon en el orden de certitud (1= estás más seguro; 6 = menos seguro)

_____ *Waynasipaskuna papata**n** ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**s** ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**s** ayllasha**sqa**ku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'
_____ *Waynasipaskuna papata**n** ayllasha**rqa**nku.* 'The young men and women unearthed the potatoes.'

1. *Paramusqa*. 'It rained.'
a. Lo más probable es que la persona que está diciendo esto solamente se sintió pero no vio y no olfateó la lluvia.
(a. Most likely, the person who is saying this only felt but did not see and did not smell the rain.)
b. Lo más probable es que la persona que está diciendo esto solamente olfateó pero no vio y no se sintió la lluvia.
(b. Most likely, the person who is saying this only smelled but did not see and did not feel the rain.)

2. *T'anta allin karqan*. 'The bread was good.'
a. Lo más probable es que la persona que está diciendo esto saboreó pero no vio y no olfateó el pan.
(a. Most likely, the person saying this tasted but did not see and did not smell the bread.)
b. Lo más probable es que la persona que está diciendo esto olfateó pero no vio y no saboreó el pan.
(b. Most likely, the person saying this smelled but did not see and did not taste the bread.)

3. *Warmi pitarqan*. 'The woman smoked.'
a. Lo más probable es que la persona que está diciendo esto solamente olfateó el humo del cigarrillo pero no lo vio.
(a. Most likely, the person saying this only smelled the cigarette smoke but did not see it.)
b. Lo más probable es que la persona que está diciendo esto vio y olfateó el humo del cigarrillo.
(b. Most likely, the person saying this saw and smelled the cigarette smoke.)

4. *Mihunata wayk'usharqan*. '(S)he was cooking the food.'
a. Lo más probable es que la persona que está diciendo esto solamente escuchó pero no vio y no olfateó que alguien estaba cocinando comida.
(a. Most likely, the person saying this only heard but did not see and did not smell that someone was cooking food.)
b. Lo más probable es que la persona que está diciendo esto solamente olfateó pero no vio y no escuchó que estaba cocinando la comida.
(b. Most likely, the person saying this only smelled but did not see and did not hear that the food was cooking.)

5. *Wayronqo ulluruwarqan*. 'The bee stung me.'
a. Lo más probable es que la persona que está diciendo esto no vio cuando la abeja le picó pero solamente se lo sintió.
(a. Most likely, the person saying this didn't see when the bee bit him but only felt it.)
b. Lo más probable es que la persona que está diciendo esto vio y se sintió cuando la abeja le picó.
(b. Most likely, the person saying this saw and felt when the bee bit him.)

6. *Wayronqo ulluruwasqa*. 'The bee (had) stung me.'
a. Lo más probable es que la persona que está diciendo esto solamente se sintió pero no vio y no escuchó cuando la abeja le picó.
(a. Most likely, the person saying this only felt but did not see and did not hear when the bee stung him.)
b. Lo más probable es que la persona que está diciendo esto escuchó y se sintió pero no vio cuando la abeja le picó.
(b. Most likely, the person saying this heard and felt but did not see when the bee stung him.)

7. *Trago tortapin kasharqan*. 'There was alcohol in the cake.'
a. Lo más probable es que la persona que está diciendo esto vio cuando el cocinero le echó trago a la torta.
(a. Most likely, the person saying this saw when the cook put alcohol into the cake.)
b. Lo más probable es que la persona que está diciendo esto solamente saboreó el trago en la torta pero no vio cuando el cocinero le echó trago a la torta.
(b. Most likely, the person saying this only tasted the alcohol in the cake but did not see when the cook put the alcohol into the cake.)

8. *Hank'a allin kasqa*. 'The toasted corn was good.'
a. Lo más probable es que la persona que está diciendo esto solamente escuchó cuando alguien comía la hank'a pero no la saboreó y no lo vio.
(a. Most likely, the person saying this only heard when someone was eating the toasted corn but did not taste it and didn't see it.)
b. Lo más probable es que la persona que está diciendo esto solamente saboreó la hank'a pero no lo vio y no lo escuchó.
(b. Most likely, the person saying this only tasted the toasted corn but did not see it and didn't hear it.)

9. *Takiqmi waqasharqan*. 'The singer was crying.'
a. Lo más probable es que la persona que está diciendo esto vio y escuchó cuando el cantante lloraba.
(a. Most likely, the person saying this saw and heard when the singer was crying.)
b. Lo más probable es que la persona que está diciendo esto solamente escuchó y no vio cuando el cantante lloraba.
(b. Most likely, the person saying this only heard and did not see when the singer was crying.)

10. *Ch'uño phasisqa karqan*. 'The dehydrated potato was boiled.'
a. Lo más probable es que la persona que está diciendo esto sancochó las papas.
(a. Most likely, the person saying this boiled the potatoes.)
b. Lo más probable es que la persona que está diciendo esto no es la persona que sancochó las papas.
(b. Most likely, the person saying this isn't the person who boiled the potatoes.)

11. *Limamansi risqa*. 'He/she went to Lima.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que su mamá es la persona que fue a Lima.
(a. Most likely, the person saying this heard this information from his/her mom and his/her mom is the person who went to Lima.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que la amiga de la mamá es la persona que fue a Lima.
(b. Most likely, the person saying this heard this information from his/her mom and the mom's friend is the person who went to Lima.)

12. *Qhatupi papakunatas rantisqa*. 'He/she bought potatoes at the market.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de un desconocido.
(a. Most likely, the person saying this heard this information from a stranger.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mejor amiga.
(b. Most likely, the person saying this heard this information from his/her best friend.)

13. *Chincheropi misapis takisqa*. '(S)he sang in Chinchero at a mass.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su mamá y que la amiga de la mamá es la persona que cantó en la misa.
(a. Most likely, the person saying this heard this information from his/her mom and the friend of the mom is the person who sang at the mass.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de un desconocido y que la amiga de la persona desconocida es la que cantó en la misa.
(b. Most likely, the person saying this heard this information from a stranger and the stranger's friend is the one who sang at the mass.)

14. *Askhata mihurqanku*. 'They ate a lot.'
a. Lo más probable es que la persona que está diciendo esto sabe que lo pasó recién.
(a. Most likely, the person saying this knows that it happened recently.)
b. Lo más probable es que la persona que está diciendo esto sabe que lo pasó hace mucho tiempo.
(b. Most likely, the person saying this knows that it happened a long time ago.)

15. *Allinta takirqanku*. 'They sang well.'
a. Lo más probable es que la persona que está diciendo esto los miró cantar en la televisión.
(a. Most likely, the person saying this saw them sing on television.)
b. Lo más probable es que a la persona que está diciendo esto le contó un conocido por teléfono.
(b. Most likely, an acquaintance of the person saying this told this person on the phone.)

16. *Wayna bolatas hayt'asqa*. 'The boy kicked the ball.'
a. Lo más probable es que la persona que está diciendo esto miró esto en la televisión.
(a. Most likely, the person saying this saw this on television.)
b. Lo más probable es que la persona que está diciendo esto lo escuchó en la radio.
(b. Most likely, the person saying this heard it on the radio.)

17. *Runasimipi rimarqani chay runawan*. 'I spoke in Quechua with that person.'
a. Lo más probable es que la persona que está diciendo esto quiso hablar en quechua con la persona.
(a. Most likely, the person saying this wanted to speak in Quechua with the person.)
b. Lo más probable es que la persona que está diciendo esto habló en quechua con la persona por equivocación.
(b. Most likely, the person saying this spoke in Quechua with the person by mistake.)

18. *Runasimipi rimarqani*. 'I spoke in Quechua.'
a. Lo más probable es que la persona que está diciendo esto estaba orgullosa de hablar quechua en ese momento.
(a. Most likely, the person saying this was proud to speak Quechua at that moment.)
b. Lo más probable es que la persona que está diciendo esto tenía vergüenza de hablar quechua en ese momento.
(b. Most likely, the person saying this was ashamed to speak Quechua at that moment.)

19. *Michi wallpa aychatas mihusqa*. 'The cat ate chicken.'
a. Lo más probable es que la persona que está diciendo esto está segura.
(a. Most likely, the person saying this is sure.)
b. Lo más probable es que la persona que está diciendo esto no está segura.
(b. Most likely, the person saying this isn't sure.)

20. *Trago tortapi kasharqan*. 'The alcohol was in the cake.'
a. Lo más probable es que para la persona que está diciendo esto, era una sorpresa.
(a. Most likely, for the person saying this, it was a surprise.)
b. Lo más probable es que para la persona que está diciendo esto, no era ninguna sorpresa.
(b. Most likely, for this person saying this, it wasn't a surprise.)

21. *Fotopi waynota tususqaku*. 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto ve que la foto está borrosa.
(a. Most likely, the person saying this sees that the photo is blurry.)
b. Lo más probable es que la persona que está diciendo esto ve que la foto está nítida.
(b. Most likely, the person saying this sees that the photo is clear.)

22. *Fotopi waynota tususqaku*. 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto sabe que la persona a quién lo está contando va a poder ver la foto.
(a. Most likely, the person saying this knows that the person to whom he/she is telling this is going to be able to see the photo.)
b. Lo más probable es que la persona que está diciendo esto sabe que la persona a quién lo está contando no va a poder ver la foto.

(b. Most likely, the person saying this knows that the person to whom he/she is telling this won't be able to see the photo.)

23. *Fotopi waynota tususqaku*. 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto no salió en la foto.
(a. Most likely, the person saying this didn't come out in the photo.)
b. Lo más probable es que la persona que está diciendo esto salió en la foto.
(b. Most likely, the person saying this came out in the photo.)

24. *Fotopi waynota tususqaku*. 'They danced huayno in the photo.'
a. Lo más probable es que la persona que está diciendo esto estaba allí cuando se sacó la foto.
(a. Most likely, the person saying this was there when the photo was taken.)
b. Lo más probable es que la persona que está diciendo esto no estaba allí cuando se sacó la foto.
(b. Most likely, the person saying this wasn't there when the photo was taken.)

25. *Chincheropis tiyasqa*. 'He/she lived in Chinchero.'
a. Lo más probable es que la persona que está diciendo esto leyó esta información en un libro respetado y confiable.
(a. Most likely, the person saying this read this information in a respected and trustworthy book.)
b. Lo más probable es que la persona que está diciendo esto leyó esta información en una revista no respetada y no confiable.
(b. Most likely, the person saying this read this information in a disrespected and untrustworthy magazine.)

26. *Qowe aychatas mihusqa*. 'He/she/it ate guinea pig.'
a. Lo más probable es que la persona que está diciendo esto escuchó esta información de su primo sobre el amigo del primo y que lo pasó hace mucho tiempo.
(a. Most likely, the person saying this heard this information from his/her cousin about the cousin's friend and it happened a long time ago.)
b. Lo más probable es que la persona que está diciendo esto escuchó esta información de su primo sobre el amigo del primo y que lo pasó recién.
(b. Most likely, the person saying this heard this information from his/her cousin about the cousin's friend and it happened recently.)

27. *Mayupin karqan*. 'It/he/she was in the river.'
a. Lo más probable es que la persona que está diciendo esto lo vio y estaba sorprendida.
(a. Most likely, the person saying this saw it and was surprised.)
b. Lo más probable es que la persona que está diciendo esto lo vio y no estaba sorprendida.
(b. Most likely, the person saying this saw it and wasn't surprised.)

28. *Llank'aq mihurqan*. 'The worker ate.'
a. Lo más probable es que la persona que está diciendo esto lo soñó.
(a. Most likely, the person saying this dreamt it.)
b. Lo más probable es que la persona que está diciendo esto lo vio.
(b. Most likely, the person saying this saw it.)

29. *Tusuq allinta tusurqan*. 'The dancer danced well.'
a. Lo más probable es que la persona que está diciendo esto estaba borracha cuando lo vio.
(a. Most likely, the person saying this was drunk when he/she saw it.)
b. Lo más probable es que la persona que está diciendo esto no estaba borracha cuando lo vio.
(b. Most likely, the person saying this wasn't drunk when he/she saw it.)

30. *Ovejachaymi chinkakurqan*. 'My little sheep got lost.'
a. Lo más probable es que la persona que está diciendo esto no piensa que va a recibir castigo.
(a. Most likely, the person saying this doesn't think that he/she will receive a punishment.)
b. Lo más probable es que la persona que está diciendo esto piensa que va a recibir castigo.
(b. Most likely, the person saying this thinks he/she will receive a punishment.)

31. *Limamansi rinqa*. 'He/she will go to Lima.'
a. Lo más probable es que la persona que está diciendo esto sabe que es mala noticia.
(a. Most likely, the person saying this knows that it is bad news.)
b. Lo más probable es que la persona que está diciendo esto sabe que es buena noticia.
(b. Most likely, the person saying this knows that it is good news.)

32. *Wasiykimansi risaqku*. 'We're going to your house.'
a. Lo más probable es que la persona que está diciendo esto sabe que es una mentira.
(a. Most likely, the person saying this knows that it is a lie.)
b. Lo más probable es que la persona que está diciendo esto sabe que es verdad.
(b. Most likely, the person saying this knows that it is true.)

33. *Yachachiq Ollantaytambomanmi rinqa*. 'The teacher will go to Ollantaytambo.'
a. Lo más probable es que la persona que está diciendo esto piensa que el profesor irá a Ollantaytambo.
(a. Most likely, the person saying this thinks the teacher will go to Ollantaytambo.)
b. Lo más probable es que la persona que está diciendo esto no piensa que el profesor irá a Ollantaytambo.
(b. Most likely, the person saying this doesn't think the teacher will go to Ollantaytambo.)

34. *Qosqomanmi rirqan*. 'He/she went to Cuzco.'
a. Lo más probable es que la persona que está diciendo esto está hablando con un adulto.
(a. Most likely, the person saying this is talking with an adult.)
b. Lo más probable es que la persona que está diciendo esto está hablando con un joven.
(b. Most likely, the person saying this is talking with an adolescent.)

35. *Yachachiqniy runasimipin rimarqan*. 'My teacher spoke in Quechua.'
a. Lo más probable es que la persona que está diciendo esto es una chica.
(a. Most likely, the person saying this is a girl.)
b. Lo más probable es que la persona que está diciendo esto es un chico.
(b. Most likely, the person saying this is a boy.)

APPENDIX H

Language Attitudes Interview

Verdad/Falso:

1. *Puedo expresarme mejor en quechua.*
2. *Hablo más en quechua que en español.*
3. *Los jóvenes hablan menos quechua que los adultos.*
4. *Los jóvenes no hablan bien el quechua.*
5. *Se usa el quechua más en la ciudad.*
6. *Se usa español más en el campo.*
7. *Todos los estudiantes en el Perú deben aprender el quechua.*
8. *Todos los niños en el Perú deben tener la oportunidad para recibir su educación por medio del quechua.*

9. *El español es más importante que el quechua.*
10. *Siempre puedo decir lo mismo en español y en quechua.*
11. *El español es más útil que el quechua.*
12. *El conocimiento del quechua puede ser importante en el trabajo*

Preguntas para narrar:

13. *¿Qué idioma prefieres? ¿Por qué?*
14. *¿Qué idioma usas más a diario? ¿Por qué?*
15. *¿Qué idioma es más importante? ¿Por qué?*
16. *¿Qué idioma es más hermoso? ¿Por qué?*
17. *¿Escuchas quechua en la radio? ¿Con qué frecuencia?*
18. *¿Lees periódico u otra cosa en quechua? ¿Con qué frecuencia?*
19. *¿Cómo es la cultura quechua?*
20. *¿Te identificas con la cultura quechua? ¿Por qué?*
21. *¿Si no hablaras quechua, sientes que podrías identificarte con la cultura quechua?*
22. *¿Qué va a ser tu trabajo en el futuro?*
23. *¿Vas a usar el español en el futuro en tu trabajo? ¿Cómo?*
24. *¿Vas a usar el quechua en el futuro en tu trabajo? ¿Cómo?*
25. *¿Por qué se niegan algunos quechuahablantes a hablar su idioma?*
26. *¿Es importante hablar español? ¿Por qué?*
27. *¿Alguna vez te has negado a hablar quechua? ¿Por qué?*
28. *¿Cuándo estás orgulloso/a de hablar quechua?*
29. *¿Votarías por un candidato quechuahablante? ¿Por qué?*
30. *¿Tienen prejuicios los castellanohablantes hacia los quechuahablantes? ¿Por qué?*
31. *¿Valora la gente lo incaico?*
32. *¿Son los quechuahablantes de otra raza de los castellanohablantes?*
33. *¿Qué aspectos de la cultura quechua son malos?*
34. *¿Qué aspectos de la cultura quechua son buenos?*

Language Attitudes Interview Translation

True/False

1. I can express myself better in Quechua.
2. I speak more in Quechua than in Spanish.
3. Young people speak less Quechua than adults.
4. Young people don't speak Quechua well.
5. Quechua is used more in the city.
6. Spanish is used more in the countryside.
7. All students in Peru should learn Quechua.
8. All children in Peru should have the opportunity to receive their educations through the means of Quechua.
9. Spanish is more important than Quechua.
10. I can always say the same things in Spanish and in Quechua.
11. Spanish is more useful than Quechua.
12. Knowledge of Quechua can be important at work.

Narrative Questions:

13. Which language do you prefer? Why?
14. Which language do you use more on a daily basis? Why?
15. Which language is more important? Why?
16. Which language is more beautiful? Why?
17. Do you listen to Quechua on the radio? How often?
18. Do you read the newspaper or anything else in Quechua? How often?
19. What is the Quechua culture like?
20. Do you identify yourself with the Quechua culture? Why?
21. If you didn't speak Quechua, do you feel that you would still be able to identify yourself with the Quechua culture? Why?
22. What will your future job be?
23. Are you going to use Spanish in the future in your work? How?
24. Are you going to use Quechua in the future in your work? How?
25. Why do some Quechua speakers deny that they speak their language?
26. Is it important to speak Spanish? Why?
27. Have you ever denied that you speak Quechua? Why?
28. When are you proud of speaking Quechua?
29. Would you vote for a Quechua-speaking candidate? Why?
30. Do Spanish-speakers hold prejudices against Quechua speakers? Why?
31. Do people value that which has to do with the Incas? Why?
32. Are Quechua-speakers of a different race than Spanish speakers? Why?
33. Which aspects of the Quechua culture are bad?
34. Which aspects of the Quechua culture are good?

APPENDIX I

Social Network Interview

Pasado:
1a.) Cuando tú estabas creciendo, ¿tenías amigos que sólo hablaban el castellano y no hablaban el quechua?
1b.) Si es que es sí, ¿cuántos tenías?
1c.) ¿Cuántos años tenías cuando eran amigos?
2a.) ¿Conocías a más gente en el pasado que hablaba el castellano y no el quechua?
2b.) ¿En qué forma los conocías?
3a.) Cuando tú estabas creciendo, ¿tenías amigos que hablaban el quechua?
3b.) Si es que sí, ¿cuántos tenías?
3c.) ¿Cuántos años tenías cuando eran amigos?
4a.) ¿Conocías a más gente en el pasado que hablaba el quechua?
4b.) ¿En qué forma los conocías?

Presente:
5a.) Ahora, ¿tienes amigos que hablan sólo el castellano y no hablan el quechua?
5b.) Si es que es sí, ¿cuántos son?
6a.) ¿Conoces a más gente ahora que habla sólo el castellano y no el quechua?
6b.) ¿En qué forma los conoces?
7a.) Ahora, ¿tienes amigos que hablan el quechua?
7b.) Si es que es sí, ¿cuántos son?
8a.) ¿Conoces a más gente ahora que habla el quechua?
8b.) ¿En qué forma los conoces?

Red semanal:
9a.) ¿A quiénes ves durante una semana cualquiera?:
¿En la casa?
¿En la escuela/el colegio?
¿En el trabajo?
¿En otros lugares?

9b.) ¿Cuáles idiomas hablas con estas personas?:
¿En la casa?
¿En la escuela/el colegio?
¿En el trabajo?
¿En otros lugares?

Social Network Interview Translation

Past:

1a.) While you were growing up, did you have friends who spoke Spanish but not Quechua?
1b.) If so, how many were there?
1c.) How old were you when you were friends?
2a.) Who else did you know in the past who spoke Spanish but not Quechua?
2b.) What relationships did these people have with you?
3a.) While you were growing up, did you have friends who spoke Quechua?
3b.) If so, how many were there?
3c.) How old were you when you were friends?
4a.) Who else did you know in the past who spoke Quechua?
4b.) What relationships did these people have with you?

Present:

5a.) Now, do you have friends who speak Spanish but not Quechua?
5b.) If so, how many are there?
6a.) Who else do you know now who speaks Spanish but not Quechua?
6b.) What relationships do these people have with you?
7a.) Now, do you have friends who speak Quechua?
7b.) If so, how many are there?
8a.) Who else do you know now who speaks Quechua?
8b.) What relationships do these people have with you?

Weekly Network:

9a.) Who are the people that you see during the week?:
At home?
At school? At work? At other places?

9b.) What languages do you speak with these people?
At home?
At school?
At work?
At other places?

APPENDIX J

Case Study Interview

El Pasado: 'The past'
1. *¿De dónde eres?* 'Where are you from?'
2. *¿Cómo era tu vida allí?* 'What was your life like there?'
3. *¿Qué cosas hacías allí?* 'What did you do there?'
4. *¿Con quiénes vivías?* 'Who did you live with?'
5. *¿A quiénes veían?* 'Who did you used to see?'
6. *¿Cómo era la escuela para ti?* 'What was school like for you?'
7. *¿Cómo eran los profesores?* 'What were the teachers like?'
8. *¿Cómo vivías con tu familia?* 'How was your family life?'
9. *¿Trabajabas? ¿Cómo era tu trabajo?* 'Did you used to work? What was your job like?'
10. *¿Con quiénes hablabas el quechua?* 'With whom did you used to speak Quechua?'
11. *¿Con quiénes hablabas el castellano?* 'With whom did you used to speak Spanish?'

El Cusco: (Cuzco)
12. *¿Por qué viniste a la ciudad del Cusco?* 'Why did you come to the city of Cuzco?'
13. *¿Era tu idea venir a Cusco?* 'Was it your idea to come to Cuzco?'
14. *¿Cómo era tu vida cuando recién llegaste a la ciudad? ¿Sufrías la discriminación?* 'What was your life like when you first arrived to the city? Did you suffer discrimination?'
15. *¿Dónde te quedabas?* 'Where did you stay?'
16. *¿Cómo te era distinta la vida en la ciudad?* 'How was city life different for you?'
17. *¿Cómo era la escuela acá en Cusco?* 'What was school like here in Cuzco?'
18. *¿Estás asistiendo ahora a la escuela o al colegio? ¿Dónde? ¿Cómo es?* 'Are you going to elementary school or high school now? Where?'
19. *¿Estás trabajando ahora? ¿Dónde? ¿Cómo es?* 'Are you working now? Where? What is it like?'

CdC y CAITH: (CdC and CAITH)
20. *¿Cómo te enteraste de (la Casa del Cargador)(de CAITH)?* 'How did you learn of (the Casa del Cargador)(of CAITH)?'
21. *¿Por qué viniste a vivir aquí?* 'Why did you come to live here?'
22. *¿Qué haces todos los días?* 'What do you do every day?'
23. *¿Vivir aquí en esta casa ta ha hecho valorar más tu quechua?* 'Has living in this house made you value your Quechua more?'

El futuro: (The future)
24. *¿Cuáles son tus metas para el futuro?* 'What are your goals for the future?'

BIBLIOGRAPHY

Abunuwara, Ehab. "The Structure of the Trilingual Lexicon." in *European Journal of Cognitive Psychology, 4, 4,* 311-322. Lawrence Erlbaum Associates Limited, Utah, USA, 1992.

Agar, Michael H., *The Professional Stranger, An Informal Introduction to Ethnography, Second Edition.* Academic Press, San Diego, CA, 1996.

Aksu-Koc, Ayhan A. and Slobin, Dan I., "A Psychological Account of the Development and Use of Evidentials in Turkish", 159-167, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Anastasi, Anne, *Psychological Testing.* Macmillan Publishing Company, New York, 1988.

Anderson, Lloyd B., "Evidentials, Paths of Change, and Mental Maps: Typologically Regular Asymmetries" 273-312 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Aoki, Haruo, "Evidentials in Japanese", 223-238 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Appel, René and Muysken, Pieter, *Language Contact and Bilingualism,* Institute for General Linguistics, University of Amsterdam Edward Arnold, 1987.

Aráoz, Dora and Salas, Américo, *Manual de gramática quechua, pautas fundamentales*. Instituto de Pastoral Andina, Cuzco, Peru, 1993.

Arguedas, José María, *Yawar Fiesta, Fiesta de sangre.* Editorial Horizonte, Lima, Perú, 1993.

Azevedo, Milton M., *Introducción a la Lingüística Española.* Prentice Hall, NJ, 1992.

Bendix, E.H., "The Grammaticalizationof Responsibility and Evidence: Interactional Potential of Evidential Categories in Newari", in Hill, Jane H. and Irvine, Judith T. (eds.) *Responsibility and Evidence in Oral Discourse*. Cambridge University Press, Cambridge; New York, 1993.

Berk-Seligson, Susan, "Linguistic Constraints on Intra-Sentential Code-Switching: A Study of Spanish/Hebrew Bilingualism", *Language in Society* 15:313-348, 1986.

Bernard, H. Russell, *Research Methods in Anthropology, Qualitative and Quantitative Approaches, Second Edition.* Altamira Press, Walnut Creek, CA, 1995.

Bley-Vroman, R., "What is the logical problem of foreign language learning?", 41-68, in Gass, S. and Schachter, J. (eds.) *Linguistic Perspectives on Second Language Acquisition*. Cambridge University Press, Cambridge, England, 1989.

Bloomfield, Leonard, *Language*. Holt, Rinehart and Winston, New York, 1933.

Blum-Kulka, Shoshana, House, Juliana, and Kasper, Gabriele, *Cross-Cultural Pragmatics: Requests and Apologies*, Volume XXXI in the series Advances in Discourse Processes, Ablex Publishing Corporation, Norwood, New Jersey, 1989.

Bonvillain, Nancy, *Language, Culture, and Communication, The Meaning of Messages, Second Edition.* Prentice Hall, New Jersey, 1997.

Cerrón-Palomino, Rodolfo, *Lingüística quechua*. Centro de Estudios Rurales Andinos "Bartolomé de las Casas", Cuzco, Perú, 1987.

Chafe, Wallace, "Evidentiality in English Conversation and Academic Writing", 261-272 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Chafe, Wallace (ed.), *The Pear Stories, Cognitive, Cultural, and Linguistic Aspects of Narrative Production*, Volume III in the series Advances in Discourse Processes, Ablex Publishing Corporation, Norwood, New Jersey, 1980.

Chafe, Wallace and Nichols, Johanna (eds.), *Evidentiality: The Linguistic Coding of Epistemology*, Volume XX in the series Advances in Discourse Processes, Ablex Publishing Corporation, Norwood, New Jersey, 1986.

Chomsky, Noam, *Reflections on Language.* Pantheon, New York, 1975.

Chumbow-Beban, Sammy. "Foreign Language Learning in a Multilingual Setting: The Predictability of 'the Mother Tongue Effect'". *International Review of Applied Linguistics in Language Teaching (IRAL), Nov, 22(4),* 287-296. Heidelberg, Germany, 1984.

Clyne, Michael, *Dynamics of Language Contact.* Cambridge University Press, Cambridge, UK, 2003.

Clyne, Michael. "Some of the Things Trilinguals Do." *International Journal of Bilingualism, 1, 2, Sept,* 95-116. Dept Linguistics Monash U, Australia. *International Journal of Bilingualism 5, 1,* 1-17. U Salford, UK, 1997.

Cook, Vivian, J. "Evidence for Multicompetence." *Language Learning, 42, 4, Dec,* 557-591. Dept Language & Linguistics U Essex, Wivenhoe Park Colchester, England, 1992.

Corder, S. Pit, "The Significance of Learners' Errors", *International Review of Applied Linguistics*, 5, 161-170, 1967.

Coupland, Nikolas & Jaworski, Adam, *Sociolinguistics, A Reader.* St. Martin's Press, New York, 1997.

Cressey, William W. *Spanish Phonology and Morphology: A Generative View.* Georgetown University Press, Washington D.C., 1978.

Cusihuaman, Antonio, *Diccionario Quechua, Cuzco Collao*. CBC- Centro de Estudios Regionales Andinos "Bartolomé de Las Casas", 2ª. Edición, Cuzco, Peru, 2001.

Cusihuaman, Antonio, *Gramática Quechua, Cuzco Collao*. CBC- Centro de Estudios Regionales Andinos "Bartolomé de Las Casas", 2ª. Edición, Cuzco, Peru, 2001.

Cusihuaman-Gutierrez, Antonio, *Gramática quechua: Cuzco-Collao*. Ministerio de Educación, Lima, Peru, 1976.

Dedenbach-Salazar-Saenz, Sabine, "Point of View and Evidentiality in the Huarochiri Texts (Peru, 17th Century)", 149-67 in Howard-Malverde, Rosaleen (ed.), *Creating Context in Andean Cultures*. Oxford University Press, New York, NY, 1997.

De Granda, Germán, *Estudios de lingüística andina.* Pontificia Universidad Católica del Perú, Lima, Perú, 2001.

DeLancey, Scott, "Evidentiality and Volitionality in Tibetan", 203-213 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Du-Bois, John W., "Self-Evidence and Ritual Speech", 313-336 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Dulay, Heidi C. and Burt, Marina K., "A New Perspective on the Creative Construction Process in Child Second Language Acquisition", *Language Learning*. 24, 2, Dec, 253-278, 1974d.

Dulay, Heidi C. and Burt, Marina K., "Errors and Strategies in Child Second Language Acquisition", *TESOL Quarterly*. 8, 2, Jun, 129-136, 1974c.

Dulay, Heidi C. and Burt, Marina K., "Natural Sequences in Child Second Language Acquisition", *Language Learning*. 24, 1, Jun, 37-53, 1974a.

Dulay, Heidi C. and Burt, Marina K., "You Can't Learn Without Goofing: An Analysis of Children's Second Language 'Errors'", 95-123 in Richards, Jack C. *Error Analysis: Perspectives on Second Language Acquisition*. Longman, London, 1974b.

Dulay, Heidi C. and Burt, Marina K., "Creative Construction in Second Language Learning and Teaching", 21-32, in Burt, Marina and Dulay, Heidi (eds.) *On TESOL '75: New Directions in Second Language Learning, Teaching, and Bilingual Education.* Washington, DC: Teachers of English to Speakers of Other Languages, 1975.

Duran, Richard P. (ed.) *Latino Language and Communicative Behavior.* ABLEX Publishing Corporation, Norwood, New Jersey, 1984.

Eckert, Penelope, *Linguistic Variation as Social Practice, The Linguistic Construction of Identity in Belten High.* Blackwell Publishers, Malden, MA, 2000.

Ervin-Tripp, Susan M., "Is Second Language Learning Like the First?", *TESOL Quarterly*. Los Angeles, CA, 8, 2, Jun, 111-127, 1974.

Escobar, Alberto, *Variaciones sociolingüísticas del castellano en el Perú*. Instituto de Estudios Peruanos, Lima, Peru, 1978.

Escobar, Anna María, "Contrastive and Innovative Uses of the Present Perfect and the Preterite in Spanish in Contact with Quechua", *Hispania*, 80, 859-870, American Association of Teachers of Spanish and Portuguese, 1997.

Escobar, Anna María, *Contacto Social y Lingüístico, El español en contacto con el quechua en el Perú,* Pontificia Universidad Católica del Perú Fondo Editorial, 2000.

Faller, Martina, Ph.D. at Stanford University, Department of Linguistics, Thesis: *Semantics and Pragmatics of Evidentials in Cuzco Quechua*. Dissertation Committee: David Beaver, Elizabeth Traugott, Peter Sells, Cleo Condoravdi, Stanford University, CA, 2002.

Faller, Martina, "The evidential and validational licensing conditions for the Cusco Quechua enclitic –mi", *Belgian Journal of Linguistics*, to appear.

Felix, Sascha W., "More Evidence on Competing Cognitive Systems", *Second Language Research.* 1, 1, June, 47-72, 1985.

Foster-Cohen, Susan H., *An Introduction to Child Language Development*, Longman, New York, 1999.

Freeman, Daniel H. Jr., *Applied Categorical Data Analysis.* Marcel Dekker, Inc. New York, 1987.

Friedman, Victor A., "Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian", 168-187, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Gass, Susan M. & Selinker, Larry, *Second Language Acquisition, An Introductory Course*. Lawrence Erlbaum Associates, Publishers, Mahwah, New Jersey, 2001.

Gay, L.R. & Airasian, Peter, *Educational Research*. Merrill Prentice Hall, Upper Saddle River, NJ, 2003.

Giglioli, Pier Paolo (ed.), *Language and Social Context*. Penguin Books, New York, 1990.

Goffman, Erving, "Footing" in *Semiotica*, 25, 1-2, 1-29, 1979.

Goffman, Erving, *Forms of Talk*. University of Pennsylvania Press, Philadelphia, PA, 1981.

Goffman, Erving, *Frame Analysis: An Essay on the Organization of Experience*. Harper & Row, New York, 1974.

Gokhale, D.V. & Kullback, Solomon, *The Information in Contingency Tables.* Marcel Dekker, Inc., New York, 1978.

Gordon, Lynn, "The Development of Evidentials in Maricopa", 75-88, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Gumperz, John J. (ed.), *Language and Social Identity*. Cambridge University Press, Cambridge; New York, 1982.

Gumperz, John J., *Discourse Strategies*. Cambridge University Press, Cambridge; New York, 1982.

Hakuta, Kenji, "Prefabricated Patterns and the Emergence of Structure in Second Language Acquisition", *Language Learning*. Brattleboro, VT, 24, 2, Dec., 287-297, 1974.

Hardman, Martha James, "Data-Source Marking in the Jaqi Languages", 113-136, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Hatch, Evelyn and Anne Lazaraton, *The Research Manual: Design and Statistics for Applied Linguistics*, Newbury House, 1991.

Herencia Fernández, Leandro Alvino, *Runa simi seq'e yapaykuna, Morfología quechua*. Qheswa simi hamut'ana kuraq suntur, Academia mayor de la lengua quechua, Cuzco, Peru, 2002.

Hill, Jane H. & Hill, Kenneth C., *Hablando mexicano, la dinámica de una lengua sincrética en el centro de México.* CIESAS, Tlalpan, D.F., México, 1999.

Hill, Jane H. & Irvine, Judith T., *Responsibility and Evidence in Oral Discourse.* Cambridge University Press, New York, NY, 1993.

Hofer, Barbara K. & Pintrich, Paul R. (eds.), *Personal Epistemology, The Psychology of Beliefs About Knowledge and Knowing.* Lawrence Erlbaum Associates, Publishers, Mahwah, NJ, 2002.

Hoffmann, Charlotte. "Towards a Description of Trilingual Competence." *Journal of Bilingualism 5, 1,* 1-17. University of Salford, Salford, UK., 2001.

Hornberger, Nancy H., *Haku Yachaywasiman: la educación bilingüe y el futuro del quechua en Puno.* Programa de Educación Bilingüe de Puno, Lima-Puno, 1989.

Howard-Malverde, Rosaleen (ed.), *Creating Context in Andean Cultures*. Oxford University Press, New York, NY, 1997.

Hudson, R.A., *Sociolinguistics, Second Edition.* Cambridge University Press, New York, 1998.

Hurley, Joni Kay, "The Impact of Quichua on Verb Forms Used in Spanish Requests in Otavalo, Ecuador", (in Silva-Corvalán, 1995, pp.39-51).

Hurtado de Mendoza Santander, William, *Pragmática de la cultura y la lengua quechua*. Centro de Estudios Regionales Andinos "Bartolomé de Las Casas", Cuzco, Peru and Universidad Nacional Agraria La Molina, Lima, Peru, 2001.

Hymes, Dell, *The Scope of Sociolinguistics*. Georgetown University Monograph Series on Languages and Linguistics, 25, 313-333, Austin, TX, 1972.

Instituto de Pastoral Andina, *Runasimi qusqu qullaw II, Método funcional de enseñanza del idioma quechua*. Cuzco, Peru, 1993.

Jacobsen, William H. Jr., "The Heterogeneity of Evidentials in Makah", 3-28, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Johanson, Lars and Utas, Bo (eds.), *Evidentials: Turkic, Iranian and Neighbouring Languages.* Mouton de Gruyter, Berlin; New York, 2000.

Johnson, Jacqueline S. and Newport, Elissa L., "Critical Period Effects in Second Language Learning: The Influence of Maturational State on the Acquisition of English as a Second Language", *Cognitive Psychology*, 21, 1, Jan, 60-99, 1989.

Johnstone, Barbara, *Discourse Analysis.* Blackwell Publishers, Malden, Massachusetts, 2002.

Johnstone, Barbara, *Qualitative Methods in Sociolinguistics.* Oxford University Press, New York, 2000.

Johnstone, Barbara, *The Linguistic Individual*. Oxford University Press, New York, 1996.

Kellerman, Eric and Sharwood Smith, Michael (eds.) *Crosslinguistic Influence in Second Language Acquisition*. Pergamon, Elmsford, New York, 1986.

Klee, Carol and Ocampo, Alicia, "The Expression of Past Reference in Spanish Narratives of Spanish-Quechua Bilingual Speakers", (in Silva-Corvalán, 1995, pp.52-70).

Krashen, S. D., Long, M., and Scarcella, R., "Age, Rate and Eventual Attainment in Second Language Acquisition", *TESOL Quarterly*, 13, 573-582, 1979.

Ladefoged, Peter, *A Course In Phonetics, Third Edition*. Harcourt Brace College Publishers, Fort Worth, TX, 1993.

Lado, Robert, Linguistics Across Cultures; Applied Linguistics for Language Teachers. University of Michigan Press, Ann Arbor, MI, 1957.

Lakshmanan, Usha, *Universal Grammar in Child Second Language Acquisition, Language Acquisition & Language Disorders 10.* John Benjamins Publishing Company, Philadelphia, 1994.

Langan, Katherine Ann, *Language Proficiency Use and Attitudes in Santo Tomas Chichicastenango: A Study of Language Competition*. Dissertation submitted to Georgetown University, Washington, D.C., 1990.

Lapesa, Rafael, *Historia de la Lengua Española.* Editorial Gredos, Madrid, 1997.

Larsen-Freeman, Diane and Long, Michael, *An Introduction to Second Language Acquisition Research*. Longman, London; New York, 1991.

Lee, Tae Yoon, *Morfosintaxis amerindias en el español americano, Desde la perspectiva del quechua.* Ediciones Clásicas, Universidad Complutense de Madrid, Madrid, 1997.

Lenneberg, Eric H., *Biological Foundations of Language*. Wiley, New York, 1967.

Leonard, Thomas, *A Course in Categorical Data Analysis.* Chapman & Hall/CRC, Boca Raton, FL, 2000.

Levinson, Stephen C., *Pragmatics*. Cambridge Textbooks in Linguistics, Cambridge University Press, New York, NY, 1997.

Lipski, John M. *El Español de América*, Ediciones Cátedra, Madrid, 1996.

Llamoca, Angel Marroquín: *Gramática Quechua.* Consejo Nacional de Ciencia y Tecnología, Lima, Perú, 1990.

Lockhart, James, *Spanish Peru, 1532-1560, A Social History.* The University of Wisconsin Press, Madison, Wisconsin, 1994.

Lucey, Kenneth G. (ed.), *On Knowing and the Known, Introductory Readings in Epistemology.* Prometheus Books, Amherst, NY, 1996.

Mamani P., Mario and Chávez P., Virginia, *Contacto Lingüístico, Converge Diverge El Préstamo Lexical Del Castellano En El Quechua*, Universidad Mayor de San Andrés, La Paz, Bolivia, 2001.

Manelis Klien, Harriet E. and Stark, Louisa R. (eds.), *South American Indian Languages, Retrospect and Prospect.* "Southern Peruvian Quechua", pp.481-515, "Contact and Quechua-External Genetic Relationships", pp. 644-688. University of Texas Press, Austin, TX, 1988.

Manuscript: "Asociación Civil 'Gregorio Condori Mamani' Proyecto Casa del Cargador, Manual de organización y funciones". Cusco, Perú, 1996.

Marroquín Llamoca, Angel, *Gramática quechua: Cusco-Puno*. Consejo Nacional de Ciencia y Tecnología, Lima, Perú, 1990.

McLaughlin, Barry, *Second Language Acquisition in Childhood*. Lawrence Erlbaum Associates, Hillsdale, NJ, 1978.

Menyuk, Paula, *Language Development, Knowledge and Use.* Scott Foresman and Company, Glenview, Illinois, 1988.

Mey, Jacob L., *Pragmatics, An Introduction*. Blackwell Publishers, Cambridge, MA, 1996.

Milroy, Lesley and Milroy, James, "Social network and social class: Toward an integrated sociolinguistic model" in *Language in Society*, 21, Cambridge University Press, Cambridge, MA, 1992.

Mithun, Marianne, "Evidential Diachrony in Northern Iroquoian", 89-112, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Morató Peña, Luís, *Quechua qosqo-qollaw: Basic Level*. The Latin American Studies Program, Cornell University, Ithaca, NY 1995.

Morató Peña, Luís, *Quechua qosqo-qollaw: Intermediate Level*. The Latin American Studies Program, Cornell University, Ithaca, NY 1995.

Morató Peña, Luis & Peña de Morató, Florencia, *Mama Florencia, Life in the Andean Village of Pocona in Bolivia, South America.* Summer Institute of Linguistics, Dallas, TX, 1998.

Moser, Paul K. (ed.), *The Oxford Handbook of Epistemology.* Oxford University Press, Oxford, U.K., 2002.

Myers-Scotton, Carol, *Duelling Languages, Grammatical Structure in Codeswitching.* Oxford University Press Inc., New York, 1993.

Nash, June (ed.), *La Mujer en los Andes,* Estudios Andinos 12*,* Pittsburgh, PA, 1976.

Nichols, Johanna, "The Bottom Line: Chinese Pidgin Russian", 239-257 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Nuckolls, Janis B., "The semantics of certainty in Quechua and its implications for a cultural epistemology", *Language in Society,* 22, 235-255, Cambridge University Press, NY, 1993.

Núñez Cedeño, Rafael A. y Morales-Front, Alfonso, *Fonología generativa contemporánea de la lengua española.* Georgetown University Press, Washington D.C., 1999.

Odlin, Terrence, *Language Transfer: Cross-linguistic influence in language learning.* Cambridge Applied Linguistics, Cambridge University Press, 1989.

Oswalt, Robert L., "The Evidential System of Kashaya", 29-45, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Palomino Meneses, Abdón, Manuscript: "La Casa del Cargador. Una década de experiencia", Cusco, Perú, 1999.

Penny, Ralph: *A History of the Spanish Language*. Cambridge University Press, Cambridge, UK, 1999.

Pérez, Julio Calvo, *Pragmática y gramática del quechua cuzqueño.* Centro de Estudios Regionales Andinos Bartolomé de Las Casas, Cusco, Perú, 1993.

Poplack, Shana, "Sometimes I'll start a sentence in Spanish *y termino en español*: Toward a typology of code-switching", *Linguistics*, 18, 7/8, 581-618, 1981.

Potter, Jonathan, *Representing Reality, Discourse, Rhetoric and Social Construction.* Sage Publications, London, 1996.

Rachowiecki, Rob, *Lonely Planet, Peru.* Lonely Planet Publications, Victoria, Australia, 2000.

Rofes Chávez, Maite, *¿Estás bien? CAITH: La cultura del afecto con trabajadoras del hogar.* CAITH, Cusco, Perú, 2002.

Rojas-B., Juan de la Cruz, "Análisis de errores como recurso pedagógico en la enseñanza-aprendizaje de idiomas extranjeros", in *Lenguaje*, April, 11:65-71, 1980.

Romero, Francisco Carranza, *Resultados lingüísticos del contacto quechua y español.* Editorial Libertad EIRL, Trujillo, Peru, 1993.

Salas Cruz, Américo and Zevallos Apaza, Edith F., *Runasimi qusqu qullaw, Texto de enseñanza*. Instituto de Pastoral Andina, Cuzco, Peru, 1997.

Sanchez, Liliana and Camacho, José, "'*De mi padre, su padre*': The Syntax of Word Order Transfer and Person Agreement in Andean L2 Spanish" in *Proceedings of the Annual Boston University Conference on Language Development,* 20, 1, 155-166, 1996.

Schachter, J., "Second Language Acquisition and its Relationship to Universal Grammar", *Applied Linguistics*, 9(3): 219-235, 1988.

Schiffrin, Deborah, *Approaches to Discourse.* Blackwell Publishers, Oxford, UK, 1994.

Schlichter, Alice, "The Origins and Deictic Nature of Wintu Evidentials", 46-59, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Sharwood Smith, Michael, "L2 Acquisition: Logical Problems and Empirical Solutions", 9-35, in Pankhurst, J., Sharwood Smith, M., and Van Buren, P. (eds.), *Learnability and Second Languages, A Book of Readings.* Foris, Dordrecht, The Netherlands, 1988.

Shuy, Roger W. & Fasold, Ralph W. (eds.), *Language Attitudes: Current Trends and Prospects.* Georgetown University Press, Washington, D.C. 1973.

Silva-Corvalán, Carmen, *Language Contact and Change, Spanish in Los Angeles.* Oxford Studies in Language Contact, Oxford University Press Inc., New York, 1994.

Silva-Corvalán, Carmen (ed.) *Spanish in Four Continents, Studies in Language Contact and Bilingualism*. Georgetown University Press, Washington D.C., 1995.

Silva-Corvalán, Carmen, *Sociolingüística: Teoría y análisis.* Alhambra, Madrid, 1989.

Silver, Shirley and Miller, Wick R., *American Indian Languages: Cultural and Social Contexts*. University of Arizona Press, Tucson, AZ, 1997.

Sindicato de trabajadoras del hogar, *Basta, testimonios*. Centro de Estudios Rurales Andinos, "Bartolomé de Las Casas", Cuzco, Peru, 1982.

Solá, Donald F., *Spoken Cuzco Quechua, Units 1-6*. Quechua Language Materials Project, Cornell University, Ithaca, NY, 1967.

Solá, Donald F., *Spoken Cuzco Quechua, Units 7-12*. Quechua Language Materials Project, Cornell University, Ithaca, NY, 1967.

Thomason, Sarah G., *Language Contact: An Introduction*. Georgetown University Press, Washington D.C., 2001.

Thomason, Sarah Grey and Kaufman, Terrence, *Language Contact, Creolization, and Genetic Linguistics.* University of California Press, Berkeley, 1988.

Thurgood, Graham, "The Nature and Origins of the Akha Evidentials System", 214-222 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Vach, Werner, *Logistic Regression with Missing Values in the Covariates.* Springer-Verlag, New York, 1994.

Valderrama, Ricardo & Escalante, Carmen, *Gregorio Condori Mamani, Autobiografía.* Centro de Estudios Rurales Andinos "Bartolomé de Las Casas", Cusco, Perú, 1982.

Van Valin, Robert D. Jr. and LaPolla, Randy J., *Syntax, Structure, meaning and function*, Cambridge University Press, Cambridge, UK, 1997.

Vassberg, Liliane M. *Alsatian Acts of Identity: Language Use and Language Attitudes in Alsace*. Multilingual Matters LTD, Clevedon, 1993.

Vaughan, Eva D., *Statistics, Tools for Understanding Data in the Behavioral Sciences.* Prentice Hall, Upper Saddle River, NJ, 1998.

Von Gleich, Utta & Wölck, Wolfgang, "Changes in Language Use and Attitudes of Quechua-Spanish Bilinguals in Peru" in Cole, Peter; Hermon, Gabriella; Martin, Mario Daniel (eds.) *Language in the Andes*. LAS, Newark, Delaware, 1994.

Wardhaugh, Ronald, *An Introduction to Sociolinguistics, Second Edition.* Blackwell, Cambridge, U.S.A. 1996.

Weber, David J., "Information Perspective, Profile, and Patterns in Quechua", 137-155, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Whistler, Kenneth W., "Evidentials in Patwin", 60-74, in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

White, Lydia, "Second Language Acquisition: From Initial to Final State", 130-155 in Archibald, John (ed.) *Second Language Acquisition and Linguistic Theory*. Blackwell, Malden, MA, 2000.

Whitman, R. and Jackson, K., "The Unpredictability of Contrastive Analysis", *Language Learning*. 22, 29-42, 1972.

Winford, Donald, *An Introduction to Contact Linguistics*. Blackwell Publishing, Malden, MA, 2003.

Wölck, Wolfgang, "Attitudes toward Spanish and Quechua in Bilingual Peru" in Shuy, Roger W. & Fasold, Ralph W. (eds.) *Language Attitudes: Current Trends and Prospects.* Georgetown University Press, Washington, D.C., 1973.

Woodbury, Anthony C., "Interactions of Tense and Evidentiality: A Study of Sherpa and English", 188-202 in Chafe, Wallace and Nichols, Johanna (eds.), *The Linguistic Coding of Epistemology.* Ablex, Norwood, NJ, 1986.

Wood, Linda A. & Kroger, Rolf O., *Doing Discourse Analysis, Methods for Studying Action in Talk and Text.* Sage Publications, Inc., London, 2000.

Zavala, Virginia, "Borrowing evidential functions from Quechua: The role of *pues* as a discourse marker in Andean Spanish", *Journal of Pragmatics*, 33, 999-1023, Washington D.C., 2001.

Zentella, Ana Celia, *Growing Up Bilingual, Puerto Rican Children in New York.* Blackwell Publishers, Malden, MA, 1997.

Zúñiga, Madeleine, *La educación bilingüe y la enseñanza de pronunciación castellana a niños quechua-hablantes.* Universidad Nacional Mayor de San Marcos Centro de Investigación de lingüística aplicada, Doctora en Educación en la Pontificia Universidad Católica del Perú, tesis doctorado, 1974.